D-8J

May 15, 1998

Ms. Patricia Brown-Derocher
Regional Manager
TechLaw, Inc.
20 North Wacker Drive
Suite 1260
Chicago, Illinois 60606

Reference: contract No. 68-W4-00006; Work Assignment R05052

Dear Ms. Brown-Derocher:

Thank you for your May 4, 1998, letter regarding the Siemens-Furnas Controls, Inc facility (ILD 005 129 069) located in Batavia, Illinois . The report is adequate and I have concluded that the submission along with the scoring sheets will constitute the final deliverable for the facility. Please provide a copy of the final report to the appropriate IEPA and facility contacts.

Do not hesitate to call me at (312) 886-0977 should you have additional questions or need additional clarification.

Sincerely,

/s/

Gerald W. Phillips
Corrective Action Process Manager
Waste, Pesticides and Toxics Division

cc: Bill Wesley, TechLaw
F. Norling, U.S. EPA

file copy

20 NORTH WACKER DRIVE, SUITE 1260, CHICAGO, IL 60606

TECHLAW INC.

PHONE: (312) 578-8900
FAX: (312) 578-8904
RZ2.R05052.01.ID.157

May 4, 1998

Mr. Gerald Phillips
U.S. Environmental Protection Agency
Region 5 D-8J
77 West Jackson Boulevard
Chicago, Illinois 60604

Reference: EPA Contract No. 68-W4-0006; Work Assignment No. R05052 Environmental Priorities Initiative (EPI) Assessments; Siemens-Furnas Controls, Inc., Batavia, Illinois, EPA ID No. ILD005129069; PA/VSI Report and NCAPS Scoring Report; Task 04 Deliverable

Dear Mr. Phillips:

Please find the enclosed Preliminary Assessment/Visual Site Inspection (PA/VSI) Report and the NCAPS Scoring Report for the above-referenced facility. The NCAPS total migration score is 32.20. An elevated groundwater score (37.29), surface water score (28.94), and onsite score (42.86) are, in this case, indicative of poor waste management practices involving releases of trichloroethylene (TCE) to the environment.

Should you have any questions or require additional information, please feel free to contact me at (312) 345-8963 or Mr. Bill Wesley at (312) 345-8955.

Sincerely,

Patricia Brown-Derocher

Patricia Brown-Derocher
Regional Manager

Enclosures

cc: F. Norling, EPA Region 5, w/o attachments
W. Jordan/Central Files
B. Wesley
Chicago Central Files

c:\ehs\52\52id157.wpd

PRELIMINARY ASSESSMENT/VISUAL SITE INSPECTION
FOR
SIEMENS-FURNAS CONTROLS, INC.
EPA ID No. ILD005129069
1000 McKEE STREET
BATAVIA, ILLINOIS

Submitted to:

Mr. Gerald Phillips
U.S. Environmental Protection Agency
Region 5 D-8J
77 West Jackson Boulevard
Chicago, Illinois 60604

Submitted by:

TechLaw, Inc.
20 North Wacker Drive, Suite 1260
Chicago, Illinois 60606

EPA Work Assignment No.	**R05052**
Contract No.	**68-W4-0006**
TechLaw WAM	**Mr. Bill Wesley**
Telephone No.	**312/345-8955**
EPA WAM	**Mr. Gerald Phillips**
Telephone No.	**312/886-0977**

May 4, 1998

PRELIMINARY ASSESSMENT/VISUAL SITE INSPECTION REPORT
FOR
SIEMENS-FURNAS CONTROLS, INC.
1000 McKEE STREET
BATAVIA, ILLINOIS

EPA ID NO. ILD005129069

TABLE OF CONTENTS

I. EXECUTIVE SUMMARY

The RCRA Facility Assessment (RFA) is the first step in implementing the corrective action provisions of the 1984 Hazardous and Solid Waste Amendments (HSWA) to the Resource Conservation and Recovery Act (RCRA). The purpose of the RFA is to identify environmental releases or potential releases from solid waste management units (SWMUs) and areas of concern (AOCs) that may require corrective action by the facility owner. A preliminary assessment/visual site inspection (PA/VSI) is a form of an RFA suitable for implementing the corrective action provisions of HSWA. This PA/VSI Report constitutes the reporting requirement for the RFA at the Siemens-Furnas Controls (Siemens) facility in Batavia, Illinois.

A preliminary assessment (PA) of the available U.S. Environmental Protection Agency (U.S. EPA) and State of Illinois file materials was conducted to familiarize the TechLaw, Inc. (TechLaw) Team with past compliance history, evidence of past releases, potential migration pathways, potential for exposure to any released hazardous constituents, closure methods and dates, citizen complaints, manufacturing processes and waste management practices at the Siemens facility.

A Visual Site Inspection (VSI) was conducted at the facility on September 16, 1997 by the TechLaw Team to identify and characterize SWMUs and AOCs. File material was provided to the TechLaw Team during the VSI by Mr. Donald Mullner, the Engineering Manager at the plant. The facility's outside counsel, Mr. James P. O'Brien, was also present for the duration of the VSI. The photographs taken during the VSI are documented in Appendix A. The VSI Field Notebooks are included in Appendix B, and a Site Map showing SWMU and AOC locations is presented in Appendix C.

A total of 20 SWMUs and two AOCs were identified. These are described in more detail in Sections III and IV of this report. All but two of the SWMUs were identified to have a low potential for environmental release. Release concerns are noted for the Former Drum Storage Yard (SWMU 1), the Former Trichloroethylene (TCE) Cupful Disposal Area (SWMU 2), the Former TCE Tank Area (AOC A), and the Current TCE Tank Area (AOC B).

The Former Drum Storage Yard (SWMU 1), which has not been operational since 1993, was historically used for storing an assortment of wastes including hazardous sludge (F006) from the Plating Line Pretreatment System (SWMU 15), waste TCE (F001), waste caustic soda (D001), waste kolene salt (D002), and small quantities of spent haloalkanes (F001) and waste silver cyanide (F007). Elevated levels of volatile organic compounds (trichloroethene, 1,2-dichloroethene, tetrachloroethene, methylene chloride) have been detected in soils beneath and immediately adjacent to the unit. At the time of the VSI, facility representatives indicated that the unit is scheduled for closure through the IEPA.

The Former TCE Cupful Disposal Area (SWMU 2) is a grassy area in which facility employees reportedly disposed of small quantities of spent TCE. Sampling conducted at this unit indicated

the presence of TCE and PCE at concentrations below the cleanup objectives specified in the State of Illinois' Tiered Approach to Cleanup Objectives (TACO) regulations. The IEPA has determined that no further closure activities are required at this site.

The Former TCE Tank Area (AOC A) is a unit that consisted of a 300 gallon aboveground storage tank used for storing product TCE to service the vapor degreaser in the Plating Department. The TCE tank was relocated in the early 1980s to the Current TCE Tank Area (AOC B). Sampling events conducted at the Former TCE Tank Area (AOC A) indicated the presence of cis-1,2-dichloroethylene in the soil and TCE in the groundwater. However, resampling of the unit revealed the presence of TCE in all the field blanks at levels similar to those detected in the groundwater. Further sampling led facility consultants to the conclusion that the TCE detected in the groundwater samples and in the field blanks collected for both units was due to atmospheric interference by the Vapor Degreaser unit. Similarly, soil samples collected from the Current TCE Tank Area (AOC B) indicated the presence of TCE and cis-1,2-dichloroethylene. The facility's petition for both units' acceptance into the Illinois Pre-Notice Site Cleanup Program was approved. A work plan for additional field sampling to characterize the extent of vertical and horizontal contamination has been prepared and submitted.

II. SITE DESCRIPTION

Siemens Corporation owns and operates the manufacturing and assembling facility which is known as Siemens-Furnas Controls (Siemens) and previously known as Furnas Electric Company (Furnas). Siemens acquired the facility from Furnas Electric Company in 1995. The facility is located at 1000 McKee Street in Batavia, Kane County, Illinois. The facility is located on an eight acre property. The administrative, storage and plant process units are housed in three buildings which have a total floor space of approximately 230,000 square feet.

The facility is located in a residential area and is bounded to the west by Western Avenue, to the east by Van Nortwick and Houston Streets, to the north by McKee Street, and to the south by Wilson Street. The Fox River is located approximately one mile to the east of the facility. Appendix C presents the facility's plot plan as well as the locations of all the SWMUs and AOCs.

Established at this site in 1938, the facility currently employs about 600 people and it operates two and one-half work shifts for five days per week. Siemens manufactures electrical circuit boards and motor controls for various industrial applications and is classified under Standard Industrial Classification (SIC) Number 3643 (Electric Lighting and Wiring Equipment). The manufacturing processes include metal fabrication, metal plating, plastics molding, metal and plastics etching, and automated electronics assembly. Raw materials used in the facility operations include the following: steel, zinc, chromium, tin, brass, copper, nickel, iron, lead, fiberglass, lubricants, oil, silicon coatings, and alkalis.

There are several waste streams generated at the facility. Non-hazardous solid wastes are generated at various locations. These wastes are collected and directed to the Trash Compactor (SWMU 4a) for compacting and subsequent offsite disposal. These wastes include cafeteria waste, scrapwood and other wastes which are not suitable for recycling. The SWMUs in the production area that are associated with these wastes include the representative Scrap Molding Hopper (SWMU 6), the Strip Room Wash-Off Area (SWMU 13), and the Molding Deflashing Refuse Containers (SWMU 7).

Safety Kleen Parts Washers (SWMUs 3a-d) are located in four production areas. The washers are turn-key operations managed by Safety-Kleen Corporation. Facility representatives indicated that the solvent currently used by these units is a non-hazardous "green solution". The Material Safety Data Sheets for the "green solution" showed it to be composed of petroleum distillates.

Waste Oils are generated from machinery in several locations throughout the facility. The file materials indicate that Siemens generates approximately 80 gallons of waste oil per month. The oils are collected into 55 gallon drums and taken to the Oil House (SWMU 10) for storage before being taken offsite for recycling by Excel Environmental Corporation. Collection sites for waste oils include the Unpainted Scrap Metal Hopper and Associated Oil Sump (SWMU 4f) at the Scrap Dock Area (SWMU 4), the Hydraulic Oil Collection Drum (SWMU 8), the Screw

Machine Floor Washings Collection Drum (SWMU 12), the oil skimmer associated with the Plating Line Pretreatment System (SWMU 15), the Maintenance Shop Oil Collection Drum (SWMU 17), the Maintenance Shop Oil Collection Sump (SWMU 18), and the Paint Shop Oil Collection Drum (SWMU 20).

In addition to waste oils, other recycled materials generated by the facility include scrap metal, scrap plastic moldings, and compacted corrugated cardboard boxes. Various types of scrap metal including iron, copper and brass that are generated from the facility's processes are segregated according to metal type and collected into Scrap Metal Hoppers (SWMU 5). The metals are then taken to the Scrap Metal Storage Area (SWMU 4d) in the Scrap Dock Area (SWMU 4) for temporary storage prior to off-site shipment.

Scrap plastic moldings are collected in Scrap Molding Hoppers (SWMU 6) placed at several locations throughout the facility. The hoppers are either 55 gallon drums or steel containers capable of holding several drums worth of molding material. Wastes which are not suitable for recycling are sent to the Trash Compactor (SWMU 4a). Recyclables are conveyed to the Scrap Dock Area (SWMU 4).

Corrugated cardboard material is compressed into a smaller volume by the Scrap Cardboard Compactor (SWMU 9) located in the carton store department. Once compressed, the cardboard is taken outside to the Former TCE Tank Area (AOC A) for temporary storage until it is taken offsite for recycling.

PCB-contaminated ballasts collected from florescent light bulbs are stored in 55 gallon drums in the Oil House (SWMU 10). The ballasts are collected into drums as they are generated. Once full, the drums are taken offsite for disposal.

A waste flammable liquid generated during the cleaning of the onsite conformal coating unit is temporarily stored in 55 gallon drums in the Oil House (SWMU 10). This material is transferred from the process area to the Oil House (SWMU 10) in five gallon buckets.

Spent asbestos coils are generated in the load room in the facility's test laboratory. Facility representatives indicated that the company has been replacing asbestos with fiberglass. They also indicated that a contractor is hired to remove and dispose of the asbestos material.

The facility is permitted to discharge wastewater from its production processes into the local sanitary district system. Water from the Strip Room Wash-Off Area (SWMU 13), the Plating Room Collection Trough (SWMU 14), the electronics room washer, and the paint shop washing area is either drained or pumped into the Plating Line Pre-treatment System (SWMU 15) for pre-treatment prior to being discharged into the township's water treatment system. Pollutants monitored in the wastewater include cadmium, cyanide, chromium, copper, lead, nickel, silver, toxic organics, and zinc.

Siemens/Furnas formerly generated and managed the following wastes: caustic soda waste, spent TCE, waste filters from silver cyanide plating activities, waste silver cyanide sludge and solution, methylene chloride, degreaser solvent HCFC-141B, and petroleum naphtha.

Caustic soda was generated during cleaning of a vapor degreaser unit that was formerly located in the plating room. Information on the rates of generation of caustic soda could not be found in the available file material. However, the file materials indicate that drums of caustic soda were periodically shipped off site. The vapor degreaser was taken out of service and caustic soda is no longer generated at the facility. According to information available from the file materials, the last manifested shipment of caustic soda waste occurred on October 30, 1992.

Spent TCE wastes were generated from the vapor degreaser unit. The rate of generation of TCE waste was approximately 2 drums per month. The TCE waste was collected in 55 gallon drums. The drums were initially stored in the Former Drum Storage Yard (SWMU 1) and later in the Scrap Dock Area (SWMU 4). Facility representatives indicated that no TCE wastes have been generated since the vapor degreaser unit was removed from service in 1995.

Facility representatives indicated that two cleaning and derusting operations were discontinued at the end of 1995. The silver syanide waste stream has not been generated since that time. The available file materials indicate that Furnas generated approximately 29 pounds of waste filters from silver cyanide plating operations. Records indicate that the waste filters were shipped to the United Refining and Smelting Company's Franklin Park, Illinois facility. In addition, the available records indicate that Furnas generated approximately 2,803 pounds of waste silver cyanide sludge and solution during the 1995 reporting year. This sludge was also disposed of at the aforementioned United Refining and Smelting facility. Furthermore, Furnas indicated that the shipments of waste filters from the silver cyanide plating operations and the waste silver cyanide sludge represented the disposal of all these wastes and that the facility was not going to report these waste streams in 1996 and thereafter.

Furnas generated methylene chloride waste during facility maintenance activities. During the VSI, facility representatives indicated that methylene chloride waste was occasionally generated as a result of floor (sealant) stripping activities. They further indicated that the floor sealant is no longer chemically removed. It is now removed manually by grinding. The file materials indicate that the methylene chloride waste was disposed of by Petro-Chem Corporation of Detroit, Michigan.

Furnas reported a one time disposal of 1,1-dichloro-1-fluorethane degreaser solvent HCFC-14B. Records from the 1995 reporting year indicate that the facility generated and disposed of 55 gallons of this virgin material from experimental processes. Furnas also indicated that it had eliminated the process causing this waste stream in 1995 and that the waste stream would not be reported for the 1996 reporting year. The records indicate that the aforementioned 55 gallons of the degreaser solvent were sent to a facility operated by Detrex Corporation in Melrose Park, Illinois.

In addition, approximately 15 to 20 gallons of waste petroleum naphtha were generated per month in the Safety Kleen Parts Washers (SWMU 3). The last recorded shipment of waste petroleum naphtha occurred during 1995. The records indicate that Furnas disposed of 382 gallons of waste petroleum naphtha in 1995.

Regulatory History

On September 1, 1982, the IEPA cited Furnas for exceeding the 90-day hazardous waste accumulation limit and for failing to include details regarding emergency equipment in the facility's contingency plan. The file materials include a November 1982 letter in which Furnas informed the IEPA of the amendments it had made to its contingency plan. The letter also outlined Furnas' plans for removing hazardous waste which had been stored at the facility for more than 90 days.

On October 2, 1991, the IEPA cited Furnas for the lack of a RCRA permit for storing hazardous waste for more than 90 days and for the failure to file a RCRA Part A permit application. Furnas was also cited for the failure to meet many RCRA permit requirements such as record-keeping, personnel training, and failure to submit contingency plans, waste analysis plans, and closure plans. In addition, Furnas was cited for failing to meet Land Disposal Restriction (LDR) requirements.

On October 10, 1991, Furnas outlined the measures it was taking to return to compliance in a letter to the IEPA. The IEPA conducted a follow-up inspection of the facility on June 24, 1993 and determined that Furnas had returned to compliance for the violations cited in 1991.

On June 27, 1994, the IEPA cited Furnas for not having a RCRA Part A permit, a waste analysis plan, and an operating record. Information documenting the measures the facility took to meet the compliance requirements was not found in the available file material. However, an August 29, 1994 letter from the IEPA to the facility indicates that the agency had determined that Furnas had returned to compliance for the apparent violations that had resulted from the June 27, 1994 inspection.

Closure activities for the Former Drum Storage Yard (SWMU 1) began in December 1993 when Furnas submitted a Closure Plan to the IEPA. The plan was approved with modifications in March 1994. Furnas retained Roy F. Weston, Inc. to prepare the RCRA Closure Plan and to complete the tasks stipulated in the IEPA-approved Closure Plan. Several contamination assessment investigations have been conducted at the Former Drum Storage Yard (SWMU 1) since August 1994. Subsequently, with the facility now owned by Siemens, the overall strategy of the remediation activities outlined in Siemens' Closure Plan involves the removal of soils containing volatile organic compounds (VOCs) at levels that are above the cleanup objectives specified in IEPA's 1996 "Tiered Approach to Cleanup Objectives". Siemens may also be seeking approval for an alternative remediation strategy. During the VSI, facility representatives indicated that the unit is scheduled to be closed in the current construction season.

Siemens is also currently pursuing closure of two TCE product storage areas, the Former TCE Tank Area (AOC A) and Current TCE Tank Area (AOC B) in accordance with the Illinois Site Remediation Program. It has been determined that TCE releases from these units may have migrated to the groundwater. Therefore, the facility has submitted a work plan for additional investigations to characterize the vertical and horizontal extent of the contaminated area. The work plan is still under review and the investigations are pending.

Environmental Setting

Siemens' facility is located in a residential area in the township of Batavia, Illinois. It is bounded to the west by Western Avenue, to the east by Van Nortwick and Houston Streets, to the north by McKee Street, and to the south by Wilson Street. The Fox River is located approximately one mile to the east of the facility. The nearest residential unit is located within 70 feet of the facility. No sensitive environments or wetlands were observed in the vicinity of the facility during the VSI or upon analysis of the area's USGS topographic map coverage.

Information from databases maintained by the Illinois State Water Survey reveals that there are several groundwater wells within a ½ mile radius of the facility, many of which appear to be in use. Based on available information, the nearest groundwater drinking well is believed to be located within 300 feet of the facility. Most wells were drilled into bedrock at finished depths of approximately 110 feet.

Based upon a review of a USGS topographic map, it appears that the area around the facility gently slopes to the east towards Fox River, which is also the nearest surface water body to the facility. The area around the facility has a 1-year 24-hour maximum rainfall average of about 2.5 inches and a net precipitation of approximately 2.0 inches.

The facility is located in the Fox River basin where the geology is a result of the action of running water and glacial ice deposited by the Lake Michigan Lobe of the Wisconsin glacier. The facility is underlain by silts and clays of the Carmi Member of the Equality Formation. The site stratigraphy is characterized by approximately 40 feet of glacial till overlying approximately 540 feet of Silurian dolomite bedrock. The Silurian dolomite is underlain by the Glenwood - St. Peter Sandstone Group. It is estimated that the glacial till is composed of 16 feet of silty clay and silt overlying a fine to medium grain sand and a sand and gravel unit.

The five major water-yielding units in the region are: sand and gravel aquifers in the glacial drift, the shallow (primarily) Silurian dolomite aquifer, the Glenwood - St. Peter Sandstone Group, the Ironton - Galesville Sandstone, and the Mt. Simon Sandstone. Large quantities of water are available from the deeper Sandstone units. During previous investigations at the facility, groundwater was encountered within the sand and gravel aquifer at depths between 19.8 feet and 23 feet below the ground surface. Groundwater at the site is assumed to flow in the easterly direction toward the Fox River. The facility is located approximately one mile to the west of the Fox River.

Release History

Analytical results from at least four soil sampling events at the Former Drum Storage Yard (SWMU 1) as part of RCRA Closure activities indicate the presence of VOCs at elevated concentrations, including TCE, PCE, 1,2-dichloroethane, and methylene chloride. TCE was detected at concentrations ranging from 16 ug/kg to 18,000 ug/kg. Tetrachloroethene (PCE) was detected at concentrations ranging from 4 ug/kg to 170 ug/kg. 1,2-dichloroethane was detected at concentrations ranging from 7 ug/kg to 230 ug/kg, and methylene chloride was detected at a concentration of 16 ug/kg. Closure activities for the Former Drum Storage Yard (SWMU 1) began in December 1993 when Furnas submitted a closure plan to IEPA which was subsequently approved with modifications in March 1994.

Although documentation of specific releases was not found in the available file material, it is likely that over the years, releases of TCE occurred from the Former and Current TCE Tank Areas (AOC A and AOC B respectively). This is because the analysis of soil samples taken from the Former TCE Tank Area (AOC A) had TCE concentrations ranging from 12 ug/kg to 13,600 ug/kg. Similarly, soil samples taken from the Current TCE Tank Area (AOC B) had TCE concentrations ranging from 6,800 ug/kg to 56,900 ug/kg. Siemens is currently pursuing closure of the Former TCE Tank Area (AOC A) and the Current TCE Tank Area (AOC B) in accordance with the Illinois Site Remediation Program. It has been determined that TCE releases from these units may have migrated to the groundwater.

Analytical results from sampling activities conducted at the Former TCE Tank Area (AOC A) also indicated the presence of cis-1,2-dichloroethylene at concentrations ranging from 856 ug/kg to 2,950 ug/kg. Analytical results from sampling activities conducted at the Current TCE Tank Area (AOC B) indicated the presence of cis-1,2-dichloroethylene at concentrations ranging from 471 ug/kg to 2,190 ug/kg. Furthermore, the facility has prepared and submitted a work plan for additional investigations to characterize the vertical and horizontal extent of the contaminated area.

Furnas employees reportedly disposed of small quantities of TCE ("cupfuls") in the Former TCE Cupful Disposal Area (SWMU 2) located in a grassy area adjacent to the walkway leading to the northwestern entrance to the main plant. Facility representatives indicated during the VSI that Furnas employees had reported that they had historically poured "cupfuls" of spent TCE in this grassy area. The area was added to RCRA closure activities for the Former Drum Storage Yard (SWMU 1) through an amendment to the Closure Plan. Analysis of the soil samples taken from this area indicated the presence of TCE and PCE at concentrations below 100 ug/kg and acetone at concentrations below 800 ug/kg.

At the time of the VSI, facility representatives indicated that a sitewide groundwater contamination study has been proposed.

III. SOLID WASTE MANAGEMENT UNITS

This section presents descriptions of the solid waste management units (SWMUs) identified during the PA and VSI at the Siemens facility. Photograph numbers correspond to those presented in the Photograph Log in Appendix A. Table 1 is a list of all the SWMUs and AOCs identified during the PA and VSI.

TABLE III-1

SOLID WASTE MANAGEMENT UNITS AND AREAS OF CONCERN SUMMARY SIEMENS-FURNAS CONTROLS, INC.

SWMU/AOC No.	SWMU/AOC NAME	RELEASE POTENTIAL
SWMU 1	Former Drum Storage Yard	High
SWMU 2	Former TCE Cupful Disposal Area	High
SWMU 3	Safety Kleen Parts Washers	Low
	3a: Tool Room	
	3b: Automation Room	
	3c: Molding Room	
	3d: Maintenance Shop	
SWMU 4	Scrap Dock Area	Low
	4a: Trash Compactor	
	4b: Scrap Loading Dock	
	4c: Miscellaneous Painted Scrap Metal Hopper	
	4d: Scrap Metal Storage Area	
	4e: Metal Hydroxide Sludge Storage Area	
	4f: Unpainted Scrap Metal Hopper and Associated Oil Sump	
	4g: Former Waste TCE/Metal Hydroxide Sludge Storage Area	
SWMU 5	Scrap Metal Hoppers	Low
SWMU 6	Scrap Molding Hoppers	Low
SWMU 7	Molding Deflashing Refuse Containers	Low
SWMU 8	Hydraulic Oil Collection Drum	Low

TABLE III-1 (Continued)

SOLID WASTE MANAGEMENT UNITS AND AREAS OF CONCERN SUMMARY
SIEMENS-FURNAS CONTROLS, INC.

SWMU/AOC No.	SWMU/AOC NAME	RELEASE POTENTIAL
SWMU 9	Scrap Cardboard Compactor	Low
SWMU 10	Oil House	Low
SWMU 11	Corner Rain Water Sump	Low
SWMU 12	Screw Machine Floor Washings Collection Drum	Low
SWMU 13	Strip Room Wash-Off Area	Low
SWMU 14	Plating Room Collection Trough	Low
SWMU 15	Plating Line Pre-treatment System	Low
	15a: Chrome Reduction Tank	
	15b: Pretreatment Line Collection Sump	
	15c: Neutralization Tank	
	15d: Flocculation Tank	
	15e: Solids Separator	
	15f: Sludge Pit	
	15g: Water Pit	
	15h: Filter Press	
	15i: Oil Skimmer Drum	
SWMU 16	Former Vapor Degreaser Collection Sump	Low
SWMU 17	Maintenance Shop Oil Collection Drum	Low
SWMU 18	Maintenance Shop Oil Collection Sump	Low
SWMU 19	Paint Shop Dust Collection Drum	Low
SWMU 20	Paint Shop Oil Collection Drum	Low

TABLE III-1 (Continued)

SOLID WASTE MANAGEMENT UNITS AND AREAS OF CONCERN SUMMARY
SIEMENS-FURNAS CONTROLS, INC.

SWMU/AOC No.	SWMU/AOC NAME	RELEASE POTENTIAL
AOC A	Former TCE Tank Area	High
AOC B	Current TCE Tank Area	High

SWMU 1 - Former Drum Storage Yard

Report Photo No(s): 1, 2

Log Book Photo No(s): 1-15, 1-16

Period of Operation: Pre - 1973 to 1992

Location: This unit is located outdoors, adjacent to the shipping and steel storage area at the southwest corner of the main building.

Physical Description: This unit consists of a 30 square-foot asphalt paved area that was previously used to store hazardous waste. The area is approximately 30 x 30.5 feet in size. There is no curb or containment structure around the unit's perimeter. The asphalt layer is reported to be three inches thick and is constructed over a gravel layer. At the time of the VSI, the asphalt was observed to be cracked in several places, and the perimeter of the storage area was cordoned off with yellow tape. According to facility representatives and file materials, the unit was surrounded by a fence with a gate during its operation. Immediately adjacent to the Former Drum Storage Yard, a grassy area was used for the storage of roll-off containers and empty drums (Report Photo 2).

Wastes Managed: The unit managed hazardous waste sludge (F006) from the Plating Line Pre-treatment System (SWMU 15), waste TCE (F001) from the vapor degreaser, and waste caustic soda (D001) which was generated during the clean out of the vapor degreaser. The unit also stored waste kolene salt, a corrosive solid (D002) prior to a change in process which resulted in the facility no longer generating this waste. Historical records also indicate the unit stored miscellaneous wastes in lesser quantities, namely, spent 1,1,1-trichloroethane (F001), trichlorotrifluroethane (F001), waste filters from silver cyanide plating operations, and waste silver cyanide sludge. The available file materials indicate that the estimated maximum amount of waste historically stored in the unit was about 90,000 gallons.

History of Releases: Analytical results indicate the presence of volatile organic compounds (VOCs) in soils beneath and immediately adjacent to the Former Drum Storage Yard. According to available file materials, four sampling events have occurred under RCRA closure authorities (Phases I-IV). In Phase I, samples were taken at 11 locations within and immediately adjacent to the storage yard. Results indicated that TCE was present at levels above Illinois EPA cleanup objectives (20 ug/kg) at all 11 locations. The results also showed elevated levels of 1,2-dichloroethene (total), PCE, and methylene chloride at some locations. Phase II sampling included collecting additional samples at greater depths than Phase I and extended sampling to areas outside of the storage yard to determine the horizontal extent of contamination. The results from this phase continued to show concentrations of TCE above the cleanup objective (20 ug/kg) at depths of 42-48 inches directly beneath the unit. PCE was also detected at this depth at one sample location. From this phase it was determined that the horizontal extent of the

SWMU 1 - Former Drum Storage Yard (Continued)

contamination is limited. Analytical results from the 18 to 24 inch interval from the perimeter (outside the unit - samples S-12 to S-17) indicated TCE and PCE concentrations at or below Illinois EPA cleanup objectives (20 ug/kg and 40 ug/kg respectively).

Phase III was designed to determine the vertical extent of contamination within the storage area. Twenty-six soil samples were collected at six locations at depth intervals up to 90 to 96 inches and 114 to 120 inches at one location. Analytical results indicated the presence of TCE at concentrations above the 20 ug/kg cleanup objective in all soil samples with concentrations at some depths and some locations in the range of 16,000 - 18,000 ug/kg. PCE was detected above the 40 ug/kg level at the one location.

Phase IV was conducted in the spring of 1996 to further delineate the vertical extent of contamination, with sampling conducted within the storage yard at two foot depth intervals. Analytical results showed TCE concentrations above 100 ug/kg at locations S-04 and S-08. At S-04, the concentration of TCE at 16.5 - 17.0 feet was 1,200 ug/kg and the concentration of TCE at S-08 (depth 20.5 to 21.0 feet) was 1,600 ug/kg. PCE was not detected above 100 ug/kg.

A summary of analytical results from all phases of sampling activities is included in Appendix D.

At the time of the VSI, facility representatives indicated that closure of the unit was scheduled for this construction season. They indicated that alternative technology to the remedial clean up activities proposed in the Closure Plan were being considered and may be proposed to the Illinois EPA. They also indicated that a site-wide ground water study is planned.

Potential for Past/present Release:

High (X)
Moderate ( )
Low ( )

Conclusions: Implementation of remediation of the unit is warranted through RCRA closure authorities. Remediation should consider results of the proposed site-wide groundwater study.

SWMU 2 - Former TCE Cupful Disposal Area

Report Photo No(s): 3

Log Book Photo No(s): 2-3

Period of Operation: 1967 to 1979

Location: This unit is located outside of the facility, along the western side. It is directly adjacent to the walkway leading to the northwestern entrance to the main plant.

Physical Description: This grassy area is the location at which Furnas employees reportedly disposed of small quantities of spent TCE. The dimensions of the unit are unknown. The unit's existence was discovered during a facility due diligence assessment at the time of the purchase of the property by Siemens. At that time, it was discovered that cupfuls of spent TCE would be brought to this outdoor location and poured on the ground.

The practice was no longer occurring at the time it was discovered. The area (also known as the "additional area") was added to RCRA closure activities through an amendment to the Closure Plan for the Former Drum Storage Yard (SWMU 1). Soil sampling occurred as a part of the due diligence assessment at the time of the purchase of Furnas by Siemens and also during RCRA closure sampling activities. Soil sampling protocols from the due diligence assessment were not provided by the facility representatives.

Wastes Managed: The unit managed spent TCE that was disposed of by Furnas employees. Information on the estimated overall quantity of TCE that was disposed of at the unit could not be found in the available file materials.

History of Releases: During RCRA Closure sampling activities, subsurface soil samples were collected from two sample locations, 6.0 to 6.5 feet below ground surface (bgs) at one location (SA-1) and 7.5 to 8.0 feet bgs at the second location (SA-3). Based on soil boring logs, these sample locations were native soils, below the backfill/native soil interface. Analytical results indicated the presence of TCE and PCE at concentrations below 100 ug/kg at both locations (ranging from 4 ug/kg to 22 ug/kg). Acetone was also present but at concentrations below 8,000 ug/kg (ranging from 200 to 1200 ug/kg). According to the facility representatives, these results indicate that the concentration of contaminants in the area are below clean up objectives specified in the Tiered Approach to Clean up Objectives (IEPA 1996) and no further closure activities are required. This is confirmed in a letter from the IEPA to Siemens dated September 24, 1996 in which the agency concurs with the facility that no further action is warranted.

SWMU 2 - Former TCE Cupful Disposal Area (Continued)

Potential for Past/present Release:

High (X)
Moderate ( )
Low ( )

Conclusions: Based on the findings of low levels of hazardous constituents, further action to address releases appears warranted at this time. However, further investigation of this unit has been incorporated into the activities proposed at SWMU 1. Upon completion of the facility wide groundwater study and SWMU 1 investigation, further analysis may be warranted, depending upon the results.

SWMU 3 - Safety Kleen Parts Washers

Report Photo No(s): 4, 5, 6, 7

Log Book Photo No(s): 1-1, 1-9, 1-11, 2-2

Period of Operation: See below

Location:
(a) Tool Room (Photo 1-1)
(b) Automation Room (Photo 1-9)
(c) Molding Room (Photo 1-11)
(d) Maintenance Shop (Photo 2-2)

Physical Description: These four units are parts washing stations located inside the Siemens facility and are serviced by Safety Kleen. The solvent within the units is periodically removed and replaced by Safety Kleen. Specific descriptions are presented below:

(a) - Tool Room. This unit is a lidded tank approximately three feet deep by five feet wide by four feet tall. Inside the unit is an approximately 50 gallon tank of solvent used to clean the parts. The unit is elevated four inches from the floor by steel legs. The sealed concrete floor was free of stains at the time of the VSI and had minor cracking. This unit has been operational since 1990.

(b) - Automation Room. This unit is a lidded metal tub, approximately 18 inches deep by 36 inches wide by 6 inches tall. The tub drains directly to, and sets above, a metal drum estimated to be 30 gallons in capacity. The drum sets directly on the sealed concrete floor which was free of stains and cracks at the time of the VSI. This unit has been operational since 1991.

(c) - Molding Room. This unit is a small, lidded pail estimated to be five gallons in capacity. The drum rests directly upon a cabinet, over a linoleum tiled floor. No stains or cracks were observed in the unit, which has been operational since 1990.

(d) - Maintenance Shop. This unit is a 55 gallon drum resting directly on a sealed concrete floor. The floor appeared to be free of stains and cracks at the time of the VSI. This unit has been operational since before 1990.

Wastes Managed: According to the facility representatives, the Safety Kleen solvent currently in use is a Premium Gold Solvent commonly referred to as the "green solution." Material Safety Data Sheets prepared by Safety Kleen indicate that the Premium Gold Solvent is a petroleum distillate containing petroleum naphtha. According to facility records, the units used petroleum naphtha prior to 1994.

SWMU 3 - Safety Kleen Parts Washers (Continued)

History of Releases: None observed at the time of the VSI or reported in the file materials.

Potential for Past/present Release:

High ( )
Moderate ( )
Low (X)

Conclusions: No further action is recommended since the units are located indoors above sealed concrete floors, and there is no history of release from these units.

SWMU 4 - Scrap Dock Area

Report Photo No(s): 8, 9, 10, 11, 12, 13, 14, and 15

Log Book Photo No(s): 1-2, 1-3, 1-4, 1-5, 1-6, 1-7, 1-8, 2-1

Period of Operation: See below

Location: This unit is located along the western wall inside the main facility building and across the drive from the maintenance area.

Physical Description: This unit is a loading dock comprising several waste storage areas. These individual units are described below. Corresponding photograph numbers are also identified.

4a - Trash Compactor (Report Photo No. 9). This unit is a mechanical compactor that serves as the receptacle for non-hazardous solid waste which cannot be recycled and is being shipped off-site for disposal. It is located along the southern wall of the loading dock and receives cafeteria wastes, non-recyclable scrap wooden pallets, non-recyclable scrap molding, flashing from the molding parts, ash from the burn-off unit, spent filters and powder from the paint line, and miscellaneous office and process area trash. Compacted wastes are removed from site on a routine basis by Waste Management West, formerly known as Fox Valley Disposal. This unit has been operational since before 1970.

4b - Scrap Loading Dock (Report Photo No. 15). This unit is a loading dock located immediately adjacent to the Trash Compactor and along the southern wall of the loading dock area. This unit has been operational since 1965.

4c - Miscellaneous Painted Scrap Metal Hopper (Report Photo No. 10). This unit is beside the trash compactor. It is placed in a sloped, concrete receiving area at the southwest corner of the loading dock area. The unit is a roll-off container estimated to have a capacity of 20 - 30 cubic yards. Facility representatives indicated that the scrap metal waste stored in this unit does not contain any waste oil. Therefore, this unit is not equipped with an oil sump. This unit has been operational since 1992.

4d - Scrap Metal Storage Area (Report Photo No. 11). This area is located along the western wall and central portion of the scrap dock area. It is designated for storing recyclable metals prior to off-site shipment. At the time of the VSI, 13 drums of metal scrap, sorted according to type, and several smaller bins of scrap material were observed. This unit has been operational since 1965.

4e - Metal Hydroxide Sludge Storage Area (Report Photo No. 12). This unit is located along the western wall of the loading dock area between the Scrap Metal Storage Area (SWMU 4d) and the

SWMU 4 - Scrap Dock Area (Continued)

Unpainted Scrap Metal Hopper (SWMU 4f). The is a temporary storage area for bags of hazardous metal hydroxide sludge (F006). The wastes are brought to this area from the Plating Line Pretreatment System Filter Press (SWMU 15h). At the time of the VSI, the unit contained six bags of waste. The bags rest directly on wooden pallets over a sealed concrete floor. The unit is equipped with a 12 - inch high containment curb on three sides of the storage area (south, west, and north). Facility representatives indicated that the wastes are stored for less than 90 days prior to off-site shipment for treatment and disposal by Envirite. This unit has been operational since 1992.

4f - Unpainted Scrap Metal Hopper and Associated Oil Sump (Report Photo No. 13). This unit is located in a sloped, concrete receiving area in the northwest corner of the loading dock area. The unit is a roll-off container with an estimated capacity of 20 - 30 cubic yards. The wastes stored in the unit are unpainted scrap metal parts, which are likely to be contaminated with oil. The roll-off container has holes in the bottom for drainage of the oil and the receiving area is equipped with a grate-covered, coated-concrete sump in the lower (southern) end. Facility representatives indicated that the oil which collects in the sump is periodically pumped into a drum and transferred to the Oil House (SWMU 10) for storage until it is shipped off-site. The unit is drained approximately once a month. At the time of the VSI, the receiving area inside and outside of the building was observed to be heavily stained with oil. This unit has been operational since 1992.

4g - Former Waste TCE/Metal Hydroxide Sludge Storage Area (Report Photo No. 14). This unit is an area of the loading dock that was formerly designated for the storage of hazardous wastes. Both metal hydroxide sludge and spent TCE were stored in this unit from 1992 to more recently when the storage area was moved across the aisle. Like the present storage area, this unit was equipped with containment curbing along the west, north and east wall. The floor of the area was a sealed, concrete floor. At the time of the VSI, minor cracks were observed but no stains were visible. This area is currently used for storing equipment parts.

Wastes Managed: Non-hazardous plant trash, painted and unpainted scrap metal, recyclable metals, and hazardous metal hydroxide sludge are stored in this area. In the past, spent TCE wastes were also stored in this area until the vapor degreaser was dismantled and wastes shipped off-site in May of 1996.

History of Releases: Apart from the oil in the unpainted scrap metal hopper area, no releases were observed during VSI or reported in file materials.

Potential for Past/present Release:

High ( )
Moderate ( )
Low (X)

SWMU 4 - Scrap Dock Area (Continued)

Conclusions: No further action is recommended since the units are located indoors and above sealed concrete floors or manage inert or non-hazardous wastes.

SWMU 5 - Scrap Metal Hoppers

Report Photo No(s): 16

Log Book Photo No(s): 1-10

Period of Operation: Since 1950

Location: These units are located throughout the facility. The representative unit was located in the automation room, adjacent to the Safety Kleen Parts Washer (SWMU 3b).

Physical Description: These units serve as collection points for the various scrap metals which are shipped off-site for reclamation. The units vary in size, shape, and materials of construction. The unit photographed as a representative unit is a small barrel resting directly above the sealed concrete floor. Other types of units observed included bins, boxes and pails. Once the units are full, the metals are taken to the Scrap Dock Area (SWMU 4) and stored in the Scrap Metal Storage Area (SWMU 4c) until removed for reclamation off-site.

Wastes Managed: Metals sold for scrap include iron, copper, and brass.

History of Releases: None observed at the time of the VSI or reported in the file materials.

Potential for Past/present Release:

High ( )
Moderate ( )
Low (X)

Conclusions: No further action is recommended since the units are located indoors, above sealed concrete floors, contain inert materials, and there is no history of release from these units.

SWMU 6 - Scrap Molding Hoppers

Report Photo No(s): 16

Log Book Photo No(s): 1-10

Period of Operation: Since before 1950.

Location: These units are located in several locations throughout the Molding Department.

Physical Description: These units collect scrap molding in the production area. The representative units photographed consist of a steel hopper estimated to hold approximately 2-3 cubic yards of scrap molding and a cardboard drum with an estimated capacity of 55 gallons. The collected molding is either shipped off-site for recycling, or if it is non-recyclable, the wastes are sent to the Trash Compacter (SWMU 4a) for disposal at a landfill.

Wastes Managed: Scrap molding (plastic).

History of Releases: None observed at the time of the VSI or reported in the file materials.

Potential for Past/present Release:

High ( )
Moderate ( )
Low (X)

Conclusions: No further action is recommended since the units are located indoors, above sealed concrete floors, contain inert materials, and there is no history of release from these units.

SWMU 7 - Molding Deflashing Refuse Containers

Report Photo No(s): 17

Log Book Photo No(s): 1-12

Period of Operation: Since 1993

Location: This unit is located inside the Molding Department adjacent to the Hunziker Filtronic deflashing machine.

Physical Description: This unit consists of standard, plastic 20-gallon garbage cans which are used to collect and store deflashing materials from the deflashing machine. The deflashing machine is designed to tumble molding parts along with tiny plastic beads which serve to trim rough edges from the plastic molding parts. The spent beads, and tiny plastic "filings" from the molding are discharged directly from the deflashing unit to the garbage can below. As the garbage can is filled it is moved for temporary storage immediately adjacent to the machine. The cans are directly set on the sealed concrete floor. The collected deflashing materials are then sent to the trash compactor for off-site disposal.

Wastes Managed: Spent deflashing beads and plastic filings.

History of Releases: None observed during the VSI or reported in the file materials.

Potential for Past/present Release:

High ( )
Moderate ( )
Low (X)

Conclusions: No further action is recommended since the units are located indoors, above sealed concrete floors, contain inert materials and there is no history of release from these units.

SWMU 8 - Hydraulic Oil Collection Drum

Report Photo No(s): 18

Log Book Photo No(s): 1-13

Period of Operation: Since 1994.

Location: This unit is located in the Carton Stores Department.

Physical Description: This unit is a 55-gallon drum used to collect oil from the hydraulic units in the production area. Periodically, the oil is manually pumped from the process units, filtered, and returned to the unit. The collected filtrate is then drained into the Hydraulic Oil Collection Drum. Once full, the drum is taken to the Oil House (SWMU 10) prior to shipment off-site for reclamation. The drum rests directly on the sealed concrete floor which was free of cracks and stains at the time of the VSI.

Wastes Managed: Non-hazardous used oil.

History of Releases: None observed during the VSI or reported in the file materials.

Potential for Past/present Release:

High	**( )**
Moderate	**( )**
Low	**(X)**

Conclusions: No further action is recommended since the units are located indoors, above sealed concrete floors, and there is no history of release from these units.

SWMU 9 - Scrap Cardboard Compacter

Report Photo No(s): 19

Log Book Photo No(s): 1-14

Period of Operation: Since 1978.

Location: This unit is located inside the facility within the Steel Stores Department.

Physical Description: This unit is an electronic compactor for corrugated cardboard. It is designed to bundle scrap corrugated cardboard to facilitate its handling for off-site shipment and subsequent recycling. The unit is located indoors above a sealed concrete floor. Once compacted and bundled, the scrap cardboard is taken outdoors to the area of the former TCE Tank (AOC A) for storage until it is removed from site for recycling.

Wastes Managed: Scrap corrugated cardboard.

History of Releases: None observed during the VSI or reported in the file materials.

Potential for Past/present Release:

High ( )
Moderate ( )
Low (X)

Conclusions: No further action is recommended since the units are located indoors, above sealed concrete floors, and there is no history of release from these units.

SWMU 10 - Oil House

Report Photo No(s): 20

Log Book Photo No(s): 1-17

Period of Operation: Since 1947

Location: This unit is an outdoor shed located along the western property boundary.

Physical Description: This unit is a small brick building used to store drums of non-hazardous waste oil, PCB-contaminated ballasts, and raw materials. Two drums of waste oil were stored inside the building at the time of the VSI. Non-hazardous waste oils are accumulated in several locations throughout the facility. These sources of used oil include the sump at the Unpainted Scrap Metal Hopper (SWMU 4f), Plating Line Pretreatment System Oil Skimmer (SWMU 15), Paint Shop Oil Skimmer (SWMU 20), Maintenance Shop Oil Collection Sump (SWMU 18), Hydraulic Oil Collection Drum (SWMU 8), and the Screw Machine Room Floor Washings Collection Drum (SWMU 12). Facility representatives indicated that the oil is periodically tested to assure that it is non-hazardous. The drums of collected waste oil are stored in the Oil House (SWMU 10) until they are shipped off-site for recycling. The drums rest directly on a concrete floor which was stained at the time of the VSI. A black drum used for the accumulation of ballasts from fluorescent light bulbs was also observed in this unit at the time of the VSI. Ballasts are collected as they are removed from the building and they are stored until the drum is full and removed from the site. Facility representatives indicated that the waste oils are periodically removed for recycling by Excel Environmental. The Oil House (SWMU 10) is periodically used for the temporary storage of a non-hazardous waste from the Conformal Coating unit. These wastes are generated during equipment clean out and they are transferred from the process area to the Oil House in 5-gallon buckets.

Wastes Managed: Based on analytical reports of sampling events that were conducted at the facility in 1995 and 1996, the waste oil stored in this unit contains less than 2.0 ppm PCB and it is reportedly non-hazardous based on the concentrations of heavy metals present. Approximately two to three 5-gallon containers of non-hazardous waste conformal coating are also periodically stored in this unit. A drum of ballasts from fluorescent lights are accumulating in one drum. The ballasts contain PCBs.

History of Releases: The concrete floor on which the drums were resting was observed to be stained at the time of the VSI.

Potential for Past/present Release:

High ( )
Moderate ( )
Low (X)

SWMU 10 - Oil House (Continued)

Conclusions: No further action is suggested since the drums of non-hazardous oils are stored inside a building over a concrete floor, with no history of release.

SWMU 11 - Corner Rain Water Sump

Report Photo No(s): 21

Log Book Photo No(s): 1-19

Period of Operation: Since 1985.

Location: This unit is a floor sump constructed in the southeastern corner of the Screw Machine Department building.

Physical Description: This unit is a concrete floor sump that is approximately 24 inches by 24 inches and of an unknown depth. At the time of the VSI it contained standing liquid similar in appearance to the nearby drum of collected floor washing. Facility representatives indicated that the sump was designed to capture rain water that enters the building from the nearby doorway leading to the driveway. Collected liquid is discharged through a pipe in the adjacent eastern wall of the building to the asphalt paved driveway, immediately outside the Screw Machine Department building.

Wastes Managed: Facility representatives indicated that the sump collects rainwater that enters the building from the nearby driveway.

History of Releases: The unit is designed to release to the nearby asphalt driveway.

Potential for Past/present Release:

High ( )
Moderate ( )
Low (X)

Conclusions: No further action appears warranted based on the reported non-hazardous nature of the waste stream. Periodic review of procedures to assure that contaminated floor washings are not allowed into the sump may be warranted.

SWMU 12 - Screw Machine Floor Washings Collection Drum

Report Photo No(s): 21

Log Book Photo No(s): 1-19

Period of Operation: Since 1994.

Location: This unit is located in the southeastern corner of the Screw Machine Room adjacent to the Corner Rain Water Sump (SWMU 11).

Physical Description: This unit is an open 55-gallon drum containing floor washings collected from the Screw Machine Room. The oil is periodically manually skimmed from the liquid in the drum and transported to the Oil Room (SWMU 10), and the remaining aqueous liquid is discharged to the sewer. The drum rests directly on the concrete floor.

Wastes Managed: This unit manages floor washings containing oils.

History of Releases: None observed during the VSI or reported in the file materials.

Potential for Past/present Release:

High ( )
Moderate ( )
Low (X)

Conclusions: No further action is recommended since the unit has no history of release and also because it is located indoors above a concrete floor.

SWMU 13 - Strip Room Wash-Off Area

Report Photo No(s): 22

Log Book Photo No(s): 1-20

Period of Operation: Since 1991.

Location: This unit is located along the northern wall of the Strip Room.

Physical Description: It is a small room measuring approximately 10 feet by 10 feet in area and it is used for washing down parts after processing through the Ace Burnout Oven. The oven is used to bake off powder paint at 800 degrees Fahrenheit, and the captured gas is incinerated through an after-burner at 1,700 degrees Fahrenheit. The unit is used to rinse off ash from these parts. The washwater is collected and discharged directly to the Pretreatment Line Collection Sump (SWMU 15b). Floor sweepings from this unit are collected and disposed of through the Trash Compacter (SWMU 4a).

Wastes Managed: This unit manages washwater from washing of materials which have been processed through the Ace Burnout Oven and floor sweepings.

History of Releases: None reported or observed at the time of the VSI.

Potential for Past/present Release:

High ( )
Moderate ( )
Low (X)

Conclusions: No further action is warranted at this unit based on the indoor location of the unit and the collection and discharge of the washwater to the Plating Line Pretreatment System (SWMU 15).

SWMU 14 - Plating Room Collection Trough

Report Photo No(s): 23

Log Book Photo No(s): 1-21

Period of Operation: Since before 1976.

Location: This unit is constructed beneath the plating lines within the Plating Department.

Physical Description: The unit is a lined concrete trough designed to collect waste water from the plating lines. It runs the length of the plating lines in a north-south orientation and it discharges directly to the Pretreatment Line Collection Sump (SWMU 15b). Facility representatives indicated that the plating line was cleaned out and relined in 1995.

Wastes Managed: Plating Line waste water.

History of Releases: None reported or observed at the time of the VSI.

Potential for Past/present Release:

High ( )
Moderate ( )
Low (X)

Conclusions: No further action is warranted based on the lined construction of the unit and its indoor location.

SWMU 15 - Plating Line Pre-treatment System

Report Photo No(s): 24, 25, 26

Log Book Photo No(s): 1-22, 1-23, 1-25

Period of Operation: Since 1986.

Location: This unit is located in the plating line area. The chrome reduction system is located in an area east of the plating line and the pretreatment system is located in an adjacent room to the north of the plating line.

Physical Description: This system is a series of units for the pretreatment of waste water from a zinc, silver and tin plating operation and the Strip Room Wash Off Area (SWMU 13). The system consists of a chrome reduction system for chrome laden waste water, and a pretreatment system for the treated chrome waste water and all other plating line waste water. The components of the individual systems are described below.

15 a - Chrome Reduction Tank. This unit is a 300 gallon tank used for the reduction of chrome. The pH is maintained at 2.5 - 3.5 by the addition of sulfuric acid and sodium bisulfite. The treated wastewater is discharged to the pretreatment line collection sump (SWMU 15b).

15b - Pretreatment Line Collection Sump. This unit is a concrete sump constructed below grade. Waste waters are conveyed to the unit from the Chrome Reduction Tank (SWMU 15a) and the Plating Line Collection Trough (SWMU 14). Waste water is pumped from this unit to the Neutralization Tank (SWMU 15c).

15c -Neutralization Tank. This unit is a 300 gallon mixing tank in which the pH is maintained at 9.0 by the addition of lime slurry. The waste water then passes to the flocculation tank (SWMU 15d).

15d - Flocculation Tank. This unit is a 300 gallon mixing tank in which polymer (Alma Floc I) is added to facilitate flocculation. The waste water is then conveyed to the Solids Separator (SWMU 15e).

15e - Solids Separator. This unit is a settling tank to separate solids from the aqueous waste stream. The sludge which settles in the unit is conveyed to the Sludge Pit (SWMU 15f), and the aqueous waste water is pumped to the Water Pit (SWMU 15g).

15f - Sludge Pit. This unit is a 1,000 gallon capacity pit used as a collection sump for sludge from the solids separator. Incoming sludge is 0.5 - 2.5 percent solid by weight. The sludge is then conveyed to the filter press (SWMU 15h).

SWMU 15 - Plating Line Pre-treatment System (Continued)

15g - Water Pit. This unit is a 500 gallon collection sump for treated waste water. Incoming water, which is reported to contain 15- 20 mg/l of Total Suspended Solids, is pumped to the Batavia POTW.

15h - Filter Press. This unit serves to further remove liquids from the sludge. After the filter press the sludge is roughly 50 percent solids, and is bagged and bound with straps. It is generated at the rate of 30 - 35 bags per year. The waste sludge is then transferred to the Scrap Dock Area (SWMU 4) for storage. Prior to 1992, the sludge was stored in the Former Drum Storage Yard (SWMU 1). The sludge is shipped off-site for treatment and disposal by Envirite.

15i - Oil Skimmer Drum. This unit is a 55-gallon drum used to temporarily collect and store skimmed oil from the Man-Gill wash process. The oil is periodically collected and transported to the Oil House (SWMU 10). The aqueous wash solution is discharged to the Plating Line Pretreatment System (SWMU 15) approximately every 6 to 8 weeks.

Wastes Managed: The unit treats waste water from the plating lines prior to discharge to the POTW. Pollutants monitored in the waste water include cyanide, copper, nickel, chromium (total), zinc, lead, cadmium, silver, and total toxic organics. According to a 1994 RCRA inspection report, sludges from the bottom of the zinc and chrome plating tank are put into the pretreatment system and disposed of with the F006 waste.

The unit also periodically receives washwater from the Man-Gill wash process. This in-line process uses biodegradable surfactants to wash parts. Oil skimmed from this wash solution is removed and taken to the Oil House (SWMU 10). Approximately 8 to 10 ounces of skimmed oil is generated a day.

History of Releases: None observed during VSI or reported in file materials.

Potential for Past/present Release:

High ( )
Moderate ( )
Low (X)

Conclusions: No further action is recommended since the units are located indoors, above sealed concrete floors, and there is no history of release from these units.

SWMU 16- Former Vapor Degreaser Collection Sump

Report Photo No(s): 27

Log Book Photo No(s): 1-24

Period of Operation: 1970 to 1995.

Location: This unit is built into the floor of the Plating Room and it is adjacent to the former location of the vapor degreaser.

Physical Description: The blind sump has a cross-sectional area of two square feet and a depth of approximately 4-6 inches. Constructed directly into the concrete floor, it was used to collect solids as spent TCE was collected and drummed from the vapor degreaser. The collected solids were manually removed from the sump and placed into 55-gallon drums. The drums were then stored at the Former Drum Storage Yard (SWMU 1) or the Scrap Dock Area (SWMU 4g). The unit ceased operations when the vapor degreaser was removed from the facility in 1996. At the time of the VSI, a spin dryer was sitting directly on top of the sump.

Wastes Managed: Solids containing spent TCE

History of Releases: None observed during VSI or reported in file materials.

Potential for Past/present Release:

High ( )
Moderate ( )
Low (X)

Conclusions: No further action is recommended since the unit is located indoors, and there is no history of release from these units.

SWMU 17 - Maintenance Shop Oil Collection Drum

Report Photo No(s): No photograph taken.

Log Book Photo No(s): No photograph taken.

Period of Operation: Since 1980.

Location: This unit is located in the Maintenance Shop adjacent to the Maintenance Shop Parts Washer (SWMU 3d).

Physical Description: This unit is a single 55-gallon drum that is used to collect oil in the Maintenance Shop. The drum rests directly on concrete floor. Oil is manually collected during maintenance activities and poured into the drum. Once full, the drum is removed to the Oil House (SWMU 10) for temporary storage prior to off-site shipment and subsequent recycling.

Wastes Managed: This unit manages non-hazardous waste oil.

History of Releases: None reported or observed during the VSI.

Potential for Past/present Release:

High ( )
Moderate ( )
Low (X)

Conclusions: No further action is warranted at this unit based on its indoor location and on the non-hazardous nature of the waste.

SWMU 18 - Maintenance Shop Oil Collection Sump

Report Photo No(s): No photograph taken.

Log Book Photo No(s): No photograph taken.

Period of Operation: Since 1980.

Location: This unit is constructed into the floor of the Machine Shop.

Physical Description: This sump comprises three compartments which are used for the collection of used oil in the Machine Shop. The compartments are constructed into the floor and they are interconnected in a weir-design to facilitate oil/water separation. The compartments are periodically pumped out and the removed oil is drummed and taken to the Oil House (SWMU 10) prior to off-site removal. The collected wastewater is discharged through the sewer to the POTW.

Wastes Managed: This unit manages non-hazardous waste oil.

History of Releases: None reported or observed during the VSI, although the integrity of the sumps could not be determined at the time of the VSI.

Potential for Past/present Release:

High ( )
Moderate ( )
Low (X)

Conclusions: No further action, other than a periodic inspection of the sump's integrity, is warranted based on the indoor location of the unit.

SWMU 19 - Paint Shop Dust Collection Drum

Report Photo No(s): 28

Log Book Photo No(s): 2-4

Period of Operation: Since 1977.

Location: This unit is located in the Paint Shop.

Physical Description: This unit collects powder from the powder coating process which is no longer suitable for use. Powder from the process is reclaimed through the Nordson sieve unit. The Nordson unit reclaims good powder by separating dust and dirt particles from unusable powder particles. Collected material accumulates in the Paint Shop Dust Collection Drum (SWMU 19) and is disposed of as non-hazardous waste. At the time of the VSI, the drums were stored on a sealed concrete floor.

Wastes Managed: This unit collects paint dust from the powder coating line.

History of Releases: None reported or observed at the time of the VSI.

Potential for Past/present Release:

High ( )
Moderate ( )
Low (X)

Conclusions: No further action is warranted based on the indoor location of this unit and on the non-hazardous nature of the wastes it manages.

SWMU 20 - Paint Shop Oil Collection Drum

Report Photo No(s): Photograph did not develop.

Log Book Photo No(s): Photograph did not develop.

Period of Operation: Since 1993.

Location: This unit is located adjacent to the oil skimmer in the paint shop.

Physical Description: The paint room oil skimmer is used on the first stage parts washer prior to processing through the powder coating line. The first stage washer is 97 percent water and 3 percent alkaline cleaner. Oil that is washed off from the parts floats on the surface of the tank solution. It is skimmed off and collected in the skimmer prior to being transferred into a 55-gallon drum. The drum is temporarily stored adjacent to the oil skimmer until it is taken to the Oil House (SWMU 10). At the time of the VSI, two full drums and one partially full drum were observed. The drums rest upon a sealed concrete floor. Approximately 12 ounces of oil are collected per day.

Wastes Managed: This unit manages non-hazardous oil.

History of Releases: None reported or observed at the time of the VSI.

Potential for Past/present Release:

High ( )
Moderate ( )
Low (X)

Conclusions: No further action is warranted at this unit based on its indoor location above sealed concrete floors and on the non-hazardous nature of the wastes it manages.

IV. AREAS OF CONCERN

This section presents descriptions of the Areas of Concern (AOCs) identified during the PA and VSI at the Siemens facility. Photograph numbers correspond to those presented in the Photograph Log in Appendix A.

AOC A - Former TCE Tank Area

Report Photo No(s): 29

Log Book Photo No(s): 1-18

Description: The former TCE product storage area is located at the south side of the Screw Machine Department. The unit consisted of a 300-gallon above ground storage tank used for the storage of TCE product to service the Vapor Degreaser in the Plating Department. Above ground piping along the outside western wall of the Screw Machine, Strip Room, and Plating Department conveyed the TCE to the Vapor Degreaser. The Former TCE Tank rested on a concrete pad that is estimated to have had an area of three square feet. The tank was relocated in the early 1980s to the Current TCE Tank (AOC B) area along the eastern wall of the Strip and Plating Room building. At the time of the VSI, the location where the tank had been was covered with cardboard bundles.

In October 1995, two soil samples were collected from the grassy area immediately west of the former TCE tank. Analytical results indicated the presence of TCE in both samples (from 12 ug/kg to 13,600 ug/kg and cis-1,2-dichloroethylene at concentrations ranging from 856 ug/kg to 2,950 ug/kg. TCE was detected in two groundwater samples from an on-site production well. Resampling of the unit revealed the presence of TCE in all field blanks at levels similar to those detected in the groundwater. Further sampling led the facility to conclude that the TCE in the groundwater and field blanks was due to atmospheric interference from the Vapor Degreaser unit.

Following a petition to IEPA by the facility, this area has been approved for the Illinois Pre-Notice Site Clean-up Program. A work plan has been prepared and submitted for additional field sampling to characterize the vertical and horizontal extent of contamination.

Conclusions: Continued investigation under the auspices of the Illinois Pre-Notice Site Cleanup Program is warranted.

AOC B - Current TCE Tank Area

Report Photo No(s): Photograph did not develop.

Log Book Photo No(s): Photograph did not develop.

Description: The Current TCE storage tank was located at the north side of the Plating Department. The Former tank (AOC A) was relocated to the current tank location in the 1980s. It is named the Current tank because at the time of initial studies of the unit, it was still in place. However, the current tank was removed subsequent to the removal of the vapor degreaser in May 1996. The tank was a 300-gallon above ground storage tank, located on a metal stand outside the Plating Department within a wooden enclosure. The stand rested on a concrete pad, approximately 4 feet by 4 feet. The product piping was aboveground and entered the building from the north. At the time of the VSI, the tank was removed and the concrete storage pad was observed to be free of cracks.

In October 1995, soil samples were collected from the Current TCE product storage area and the adjacent grassy area (immediately north and west of the pad). Analytical results indicated the presence of TCE at concentrations ranging from 6,800 ug/kg to 56, 900 ug/kg and cis-1,2-dichloroethylene detected at concentrations ranging from 471 ug/kg to 2,190 ug/kg.

TCE was detected in two groundwater samples from an on-site production well. Resampling of the unit revealed the presence of TCE in all field blanks at levels similar to those detected in the groundwater. Further sampling led the facility to conclude that the TCE in the groundwater and field blanks was due to atmospheric interference from the Vapor Degreaser unit.

Following a petition to IEPA by the facility, this area has been approved for the Illinois Pre-Notice Site Clean-up Program. A work plan has been prepared and submitted for additional field sampling to characterize the vertical and horizontal extent of contamination.

Conclusions: Continued investigation under the auspices of the Illinois Pre-Notice Site Cleanup Program is warranted.

V. CONCLUSIONS

Release concerns are noted for the Former Drum Storage Yard (SWMU1), the Former TCE Cupful Disposal Area (SWMU 2), the Former TCE Tank Area (AOC A), and the Current TCE Tank Area (AOC B).

The Former Drum Storage Yard (SWMU 1)

The Former Drum Storage Yard (SWMU 1), which has not been operational since 1993, was historically used for storing an assortment of wastes including hazardous sludge (F006) from the Plating Line Pretreatment System (SWMU 15), waste TCE (F001), waste caustic soda (D001), waste kolene salt (D002), and small quantities of spent haloalkanes (F001) and waste silver cyanide (F007). Elevated levels of volatile organic compounds (trichloroethene, 1,2-dichloroethene, tetrachloroethene, methylene chloride) have been detected in soils beneath and immediately adjacent to the unit. Facility representatives indicated that the unit is scheduled for closure through the IEPA. Implementation of remediation of the unit is warranted through RCRA closure authorities and should consider results of the proposed site-wide groundwater study.

The Former TCE Cupful Disposal Area (SWMU 2)

The Former TCE Cupful Disposal Area (SWMU 2) is a grassy area in which facility employees reportedly disposed of small quantities of spent TCE. Sampling conducted at this unit indicated the presence of TCE and PCE at concentrations below the cleanup objectives specified in the state of Illinois' TACO regulations. The IEPA has determined that no further cleanup activities are required at this unit. Based on the findings of low levels of hazardous constituents, no further action appears warranted at this time. Upon completion of the facility-wide groundwater study, further analysis may be warranted depending on the results.

The Former TCE Tank Area (AOC A) and Current TCE Tank Area (AOC B)

The Former TCE Tank Area (AOC A) is a unit that consisted of a 300-gallon aboveground storage tank (AST) that was used for storing product TCE to service the vapor degreaser in the Plating Department. The TCE tank was relocated in the early 1980s to the Current TCE Tank Area (AOC B). Sampling events conducted at the Former TCE Tank Area (AOC A) indicated the presence of cis-1,2-dichloroethylene in the soil and TCE in the groundwater. However, resampling of the unit revealed the presence of TCE in all the field blanks at levels similar to those detected in the groundwater. Further sampling led the facility to conclude that the TCE that was in the groundwater samples and in the field blanks collected for both units was due to atmospheric interference by the Vapor Degreaser unit. Similarly, soil samples collected from the Current TCE Tank Area (AOC B) indicated the presence of TCE and cis-1,2-dichloroethylene. The facility's petition for both units' acceptance into the Illinois Pre-Notice Site Cleanup Program was approved. A work plan for additional field sampling to characterize the extent of

vertical and horizontal contamination has been prepared and submitted to the IEPA. Continued investigation under the auspices of the Illinois Pre-Notice Site Cleanup Program is warranted for both AOC A and AOC B.

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10. Correspondence from Robert C. Fox (Furnas Electric Co.) to Kenneth P. Bechely (Illinois EPA) Re: Violation of State Regulations, dated November 5, 1982.

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22. Uniform Hazardous Waste Manifest, Furnas Electric Company, June 6, 1991.

23. Correspondence from Jim Halla (Safety-Kleen Corp.) to Don Mullner (Furnas Electric Co.), Re: Notification of Receipt of Hazardous Waste Shipments, dated June 14, 1991.

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25. Plant Environmental Response Manual, Furnas Electric Company, Batavia, Illinois, July 1991.

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61. Geology for Planning in Kane County by R.H. Gilkeson & A.A. Westerman, dated May 17, 1976.

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APPENDIX A
VISUAL SITE INSPECTION PHOTOGRAPH LOG

Report Photo No.: 1
Log Book Photo No.: 1-15
Date: 09/16/97

Time: 1258
Direction: N

Description: View showing the Former Drum Storage Yard (SWMU 1) located adjacent to the shipping and steel storage area at the southwest corner of the main building. The unit is an asphalt pavement measuring approximately 30 feet by 30 feet in area.

Report Photo No.: 2
Log Book Photo No.: 1-16
Date: 09/16/97

Time: 1300
Direction: E

Description: View showing the area adjacent to the Former Drum Storage Yard (SWMU 1). It spans an area of approximately 40 feet by 30 feet. This photograph was taken to provide more information on the appearance of the area immediately adjacent to the Former Drum Storage Yard (SWMU 1).

Report Photo No.: 3
Log Book Photo No.: 2-3
Date: 09/16/97

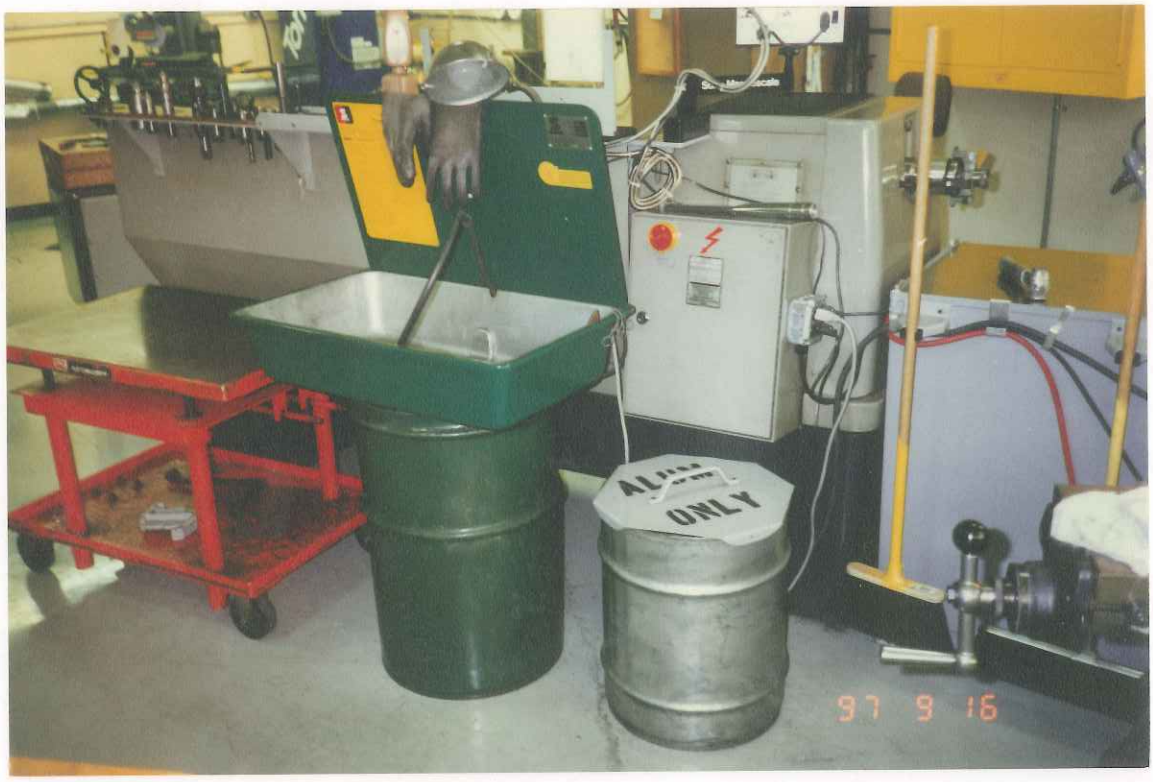
Time: 1350
Direction: E

Description: View showing Former TCE Cupful Disposal Area (SWMU 2). The area is directly adjacent to the walkway leading to the northwestern entrance to the main plant.

Report Photo No.: 4
Log Book Photo No.: 1-1
Date: 09/16/97

Time: 1145
Direction: N

Description: View showing the Safety-Kleen Parts Washer (SWMU 3a) unit located in the tool room. The capacity of this unit is approximately 55 gallons.



Report Photo No.: 5
Log Book Photo No.: 1-9
Date: 09/16/97

Time: 1215
Direction: E

Description: View showing Safety Kleen Parts Washer unit located in the Automation Room (SWMU 3b). The unit is a metallic tub measuring approximately 18 inches by 36 inches by 6 inches. The tub is set atop a 30 gallon metallic drum.

Report Photo No.: 6
Log Book Photo No.: 1-11
Date: 09/16/97

Time: 1236
Direction: E

Description: View showing the Safety Kleen Parts Washer unit located in the molding room (SWMU 3c). The unit is a 5 gallon pail placed on top of a cabinet.

Report Photo No.: 7
Log Book Photo No.: 2-2
Date: 09/16/97

Time: 1345
Direction: N

Description: View showing a Safety Kleen Parts Washer container located in the Maintenance Shop (SWMU 3d). The unit is a 55 gallon drum resting directly on a sealed concrete floor.

Report Photo No.: 8
Log Book Photo No.: 1-2
Date: 09/16/97

Time: 1150
Direction: N

Description: View showing Rag Collection Drums located in the main building near the doorway leading into the Scrap Dock Area (SWMU 4).

Report Photo No.: 9
Log Book Photo No.: 1-3
Date: 09/16/97

Time: 1158
Direction: S

Description: View of the Trash Compactor (SWMU 4a) located along the southern wall of the Scrap Dock Area (SWMU 4).

Report Photo No.: 10
Log Book Photo No.: 1-4
Date: 09/16/97

Time: 1200
Direction: SW

Description: Miscellaneous Painted Scrap Metal Hopper located inside a sloped concrete receiving area that is adjacent to the Trash Compactor (SWMU 4a).

Report Photo No.: 11
Log Book Photo No.: 1-5
Date: 09/16/97

Time: 1200
Direction: W

Description: View of Scrap Metal Storage Area (SWMU 4d) located in the central portion of the Scrap Dock Area (SWMU 4). Each of the containers visible in the photograph was filled with a particular type of metal scrap.

Report Photo No.: 12
Log Book Photo No.: 1-6
Date: 09/16/97

Time: 1203
Direction: SW

Description: View showing the Metal Hydroxide Sludge Storage Area (SWMU 4e) located in the Scrap Dock Area (SWMU 4) between the Scrap Metal Storage Area (SWMU 4d) and the Unpainted Scrap Metal Hopper (SWMU 4f). The white bags visible in the foreground contain metal hydroxide sludge.

Report Photo No.: 13
Log Book Photo No.: 1-7
Date: 09/16/97

Time:1205
Direction: NW

Description: View showing the Unpainted Scrap Metal Hopper and Associated Oil Sump (SWMU 4f) located in the Scrap Dock Area (SWMU 4). The unit has a capacity of approximately 20 to 30 cubic yards. It is used for managing unpainted scrap metal parts. Note that the Associated Oil Sump is not visible in the photo.

Report Photo No.: 14
Photo No.: 1-8
Date: 09/16/97

Time: 1210
Direction: NE

Description: View showing Former Waste TCE/Metal Hydroxide Sludge Storage Area (SWMU 4g) located in the Scrap Dock Area (SWMU 4). This unit is an area that was formerly designated for the storage of waste TCE and metal hydroxide wastes. It is currently used for storing equipment parts.

Report Photo No.: 15
Log Book Photo No.: 2-1
Date: 09/16/97

Time: 1343
Direction: N

Description: View showing the Scrap Loading Dock (SWMU 4b) area. The unit to the right which has a yellow staircase leading from it is the Trash Compactor (SWMU 4a).

Report Photo No.: 16
Log Book Photo No.: 1-10
Date: 09/16/97

Time: 1235
Direction: N

Description: View showing a Representative Scrap Molding Hopper (SWMU 6). These units are located in several locations throughout the Molding Department. The representative unit shown in the photograph consists of a hopper containing 2 to 3 cubic yards of scrap molding and a 55 gallon cardboard drum filled with scrap molding.

Report Photo No.: 17
Log Book Photo No.: 1-12
Date: 09/16/97

Time: 1240
Direction: S

Description: View showing a Molding Deflashing Refuse Container (SWMU 7) located in the facility's molding department. The unit is a 20 gallon plastic container. It is used to collect spent plastic beads and "filings" from the Deflashing machine.

Report Photo No.: 18
Log Book Photo No.: 1-13
Date: 09/16/97

Time: 1245
Direction: N

Description: View showing the Hydraulic Oil Collection Drum (SWMU 8) located in the carton stores department. The unit (colored yellow and green) is a 55 gallon drum used to collect oil from the facility's hydraulic equipment. Once full, the drum is taken to the Oil House (SWMU 10) prior to shipment off-site for reclamation.

Report Photo No.: 19
Log Book Photo No.: 1-14
Date: 09/16/97

Time: 1250
Direction: N

Description: View showing the Scrap Cardboard Compactor (SWMU 9) located in the steel stores department. The unit is used for compressing and bundling corrugated cardboard boxes into smaller packages for easier transportation off-site.

Report Photo No.: 20
Log Book Photo No.: 1-17
Date: 09/16/97

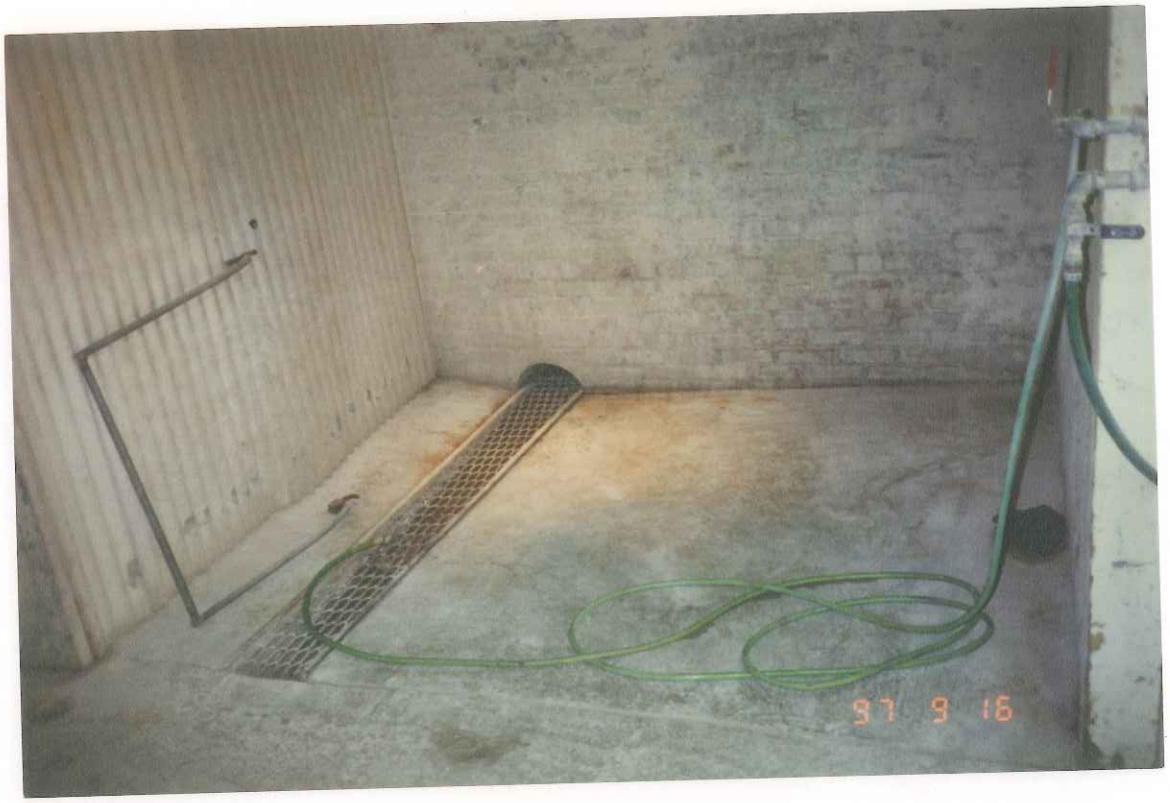
Time: 1304
Direction: E

Description: View showing two drums of non-hazardous waste oil and one 55 gallon drum (black) containing PCB-contaminated ballasts. The containers are stored inside the Oil House (SWMU 10). Besides containers of non-hazardous waste oil, drums of PCB-contaminated ballasts and raw materials are stored in the Oil House (SWMU 10).

Report Photo No.: 21
Photo No.: 1-19
Date: 09/16/97

Time: 1311
Direction: N

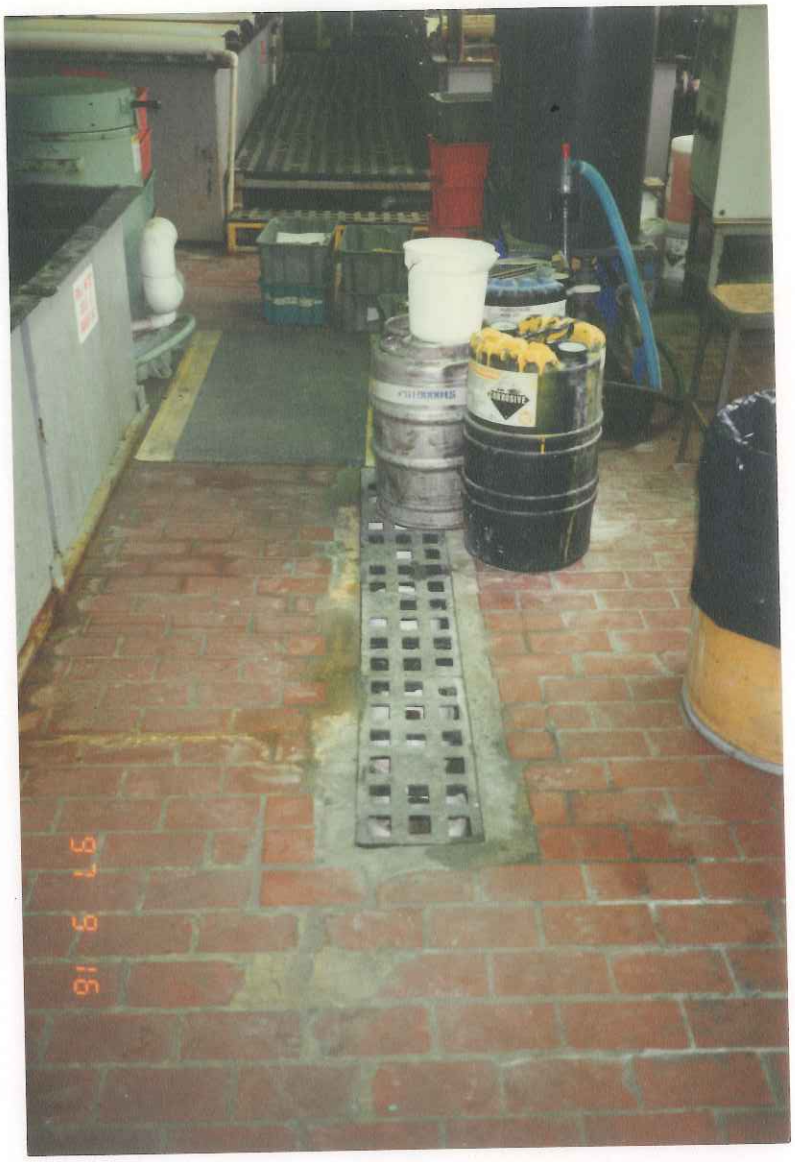
Description: View showing the Corner Rain Water Sump (SWMU 11) located in the screw machine room. Immediately behind the sump is the Screw Machine Floor Washings Collection Drum (SWMU 12), which is an open 55 gallon drum used for temporarily storing floor washings from the screw machine room.



Report Photo No.: 22
Log Book Photo No.: 1-20
Date: 09/16/97

Time: 1315
Direction: N

Description: View showing the Strip Room Wash-Off Area (SWMU 13). The unit measures approximately 3 yards by 2 yards. Waste wash-off water drains into the covered trough and eventually into the facility's wastewater pretreatment system.



Report Photo No.: 23
Log Book Photo No.: 1-21
Date: 09/16/97

Time: 1320
Direction: S

Description: View showing the Plating Room Collection Trough (SWMU 14) located in the plating line area. Rinse water from plating operations drains into this unit and flows northwards into the facility's wastewater pretreatment system.

Report Photo No.: 24
Log Book Photo No.: 1-22
Date: 09/16/97

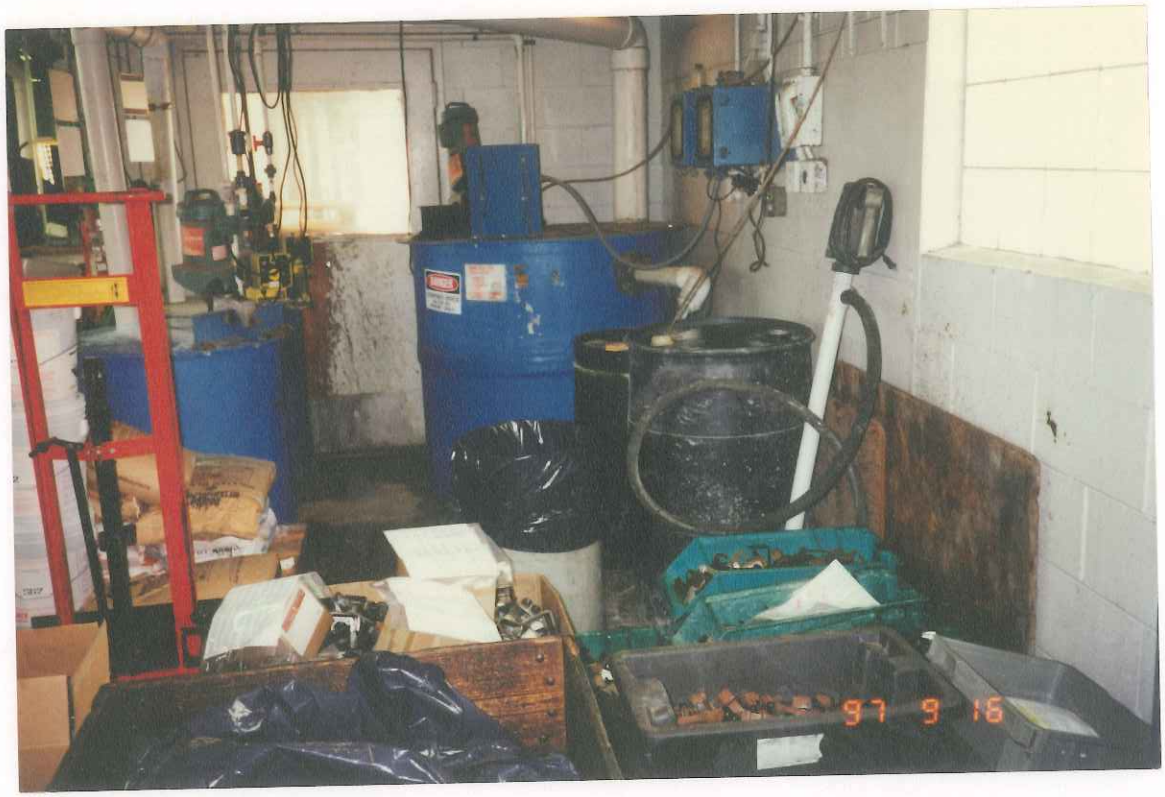
Time: 1325
Direction: S

Description: View showing parts of the Plating Line Pre-Treatment System (SWMU 15) including a Sludge Tank and part of the metallic grate covering Pretreatment Line Collection Sump (SWMU 15b).

Report Photo No.: 25
Log Book Photo No.: 1-23
Date: 09/16/97

Time:1325
Direction: S

Description: View showing one of the tanks of the Plating Line Pre-Treatment System (SWMU 15).



Report Photo No.: 26
Photo No.: 1-25
Date: 09/16/97

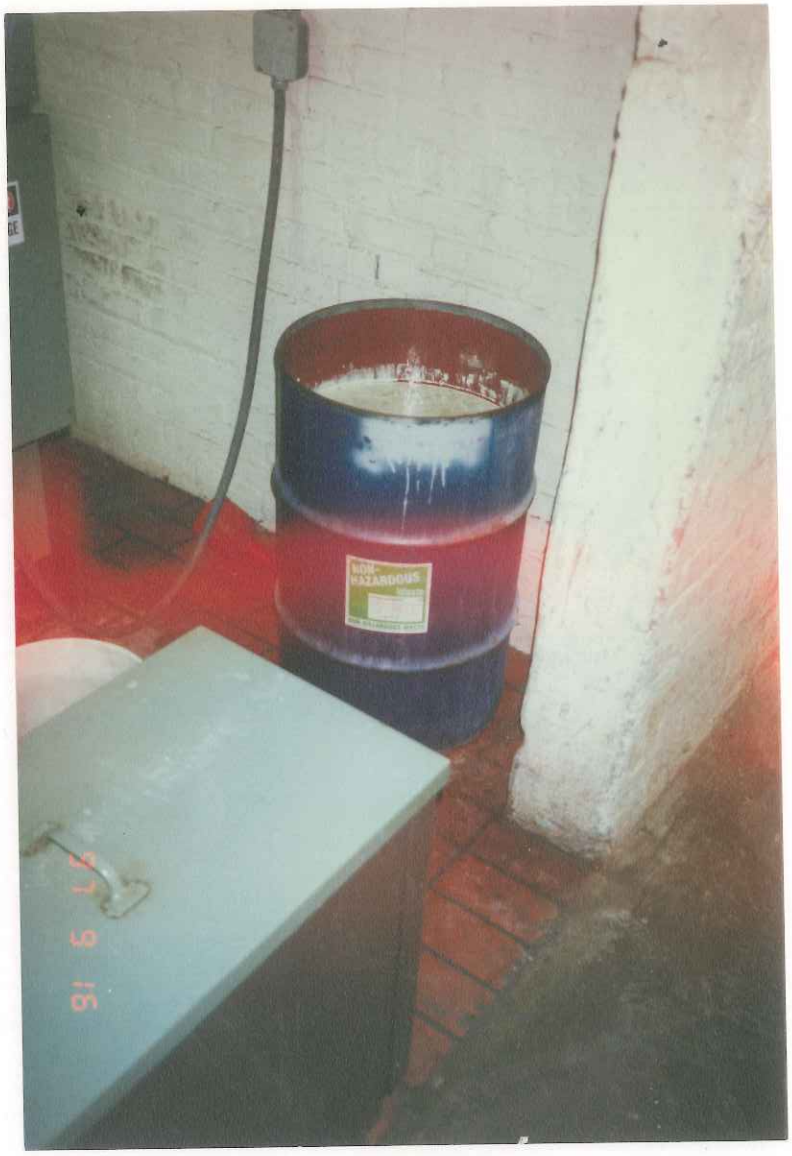
Time: 1335
Direction: S

Description: View showing the Chrome Reduction System (SWMU 15a) located in the Plating Room.

Report Photo No.: 27
Log Book Photo No.: 1-24
Date: 09/16/97

Time: 1330
Direction: N

Description: View showing the location of the Former Vapor Degreaser Collection Sump (SWMU 16) located in the Plating Room. At the time of the VSI, a spin dryer was sitting directly on top of the sump.



Report Photo No.: 28
Log Book Photo No.: 2-4
Date: 09/16/97

Time: 1355
Direction: N

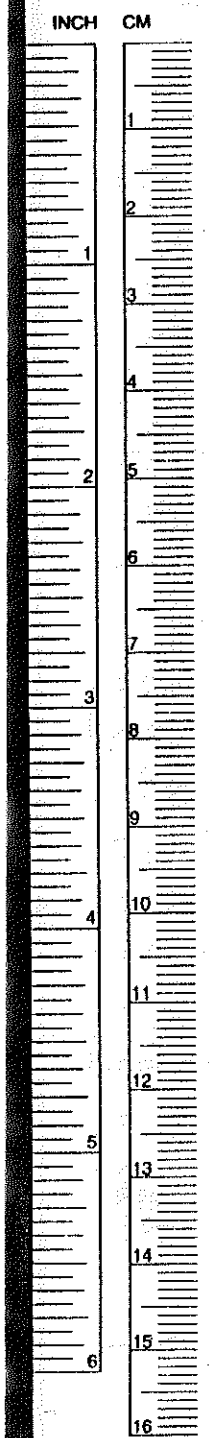
Description: View showing Paint Shop Oil Collection Drum (SWMU 20).

Report Photo No.: 29
Log Book Photo No.: 1-18
Date: 09/16/97

Time: 1305
Direction: N

Description: View showing the Former TCE Tank Area (AOC A). The TCE Tank was located in the vicinity of the of the compacted corrugated cardboard bundles visible in the photograph.

APPENDIX B
VISUAL SITE INSPECTION FIELD NOTEBOOK



MEASUREMENT CONVERSIONS

IF YOU KNOW	MULTIPLY BY	TO FIND
LENGTH		
inches	2.540	centimeters
feet	30.480	centimeters
yards	0.914	meters
miles	1.609	kilometers
millimeters	0.039	inches
centimeters	0.393	inches
meters	3.280	feet
meters	1.093	yards
kilometers	0.621	miles
WEIGHT		
ounces	28.350	grams
pounds	0.453	kilograms
grams	0.035	ounces
kilograms	2.204	pounds
VOLUME		
fluid ounces	29.573	milliliters
pints	0.473	liters
quarts	0.946	liters
gallons (U.S.)	3.785	liters
milliliters	0.033	fluid ounces
liters	1.056	quarts
liters	0.264	gallons (U.S.)
TEMPERATURE		

°C = (°F - 32) x .555
°F = (°C x 1.8) + 32

Inches	Decimals of foot	Milli-meters
1/16	.0052	1.5875
1/8	.0104	3.1750
3/16	.0156	4.7625
1/4	.0208	6.3500
5/16	.0260	7.9350
3/8	.0313	9.5250
1/2	.0417	12.700
5/8	.0521	15.875
3/4	.0625	19.050
7/8	.0729	22.225
1"	.0833	25.400
2"	.1667	50.800
3"	.2500	76.200
4"	.3333	101.60
5"	.4167	127.00
6"	.5000	152.40
7"	.5833	177.80
8"	.6667	203.20
9"	.7500	228.60
10"	.8333	254.00
11"	.9167	279.40
1 foot	1.0000	304.80

"Rite in the Rain"®
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Phone 312-345-8921

Project R050320103
Siemens/Furnas Elec.
Plano, Illinois

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CONTENTS

PAGE	REFERENCE	DATE

Siemens/Kansas Site Visit 9/16/97

Arrived on site @ 10:15,
Temp high 70's

pre meeting began @ 10:30 p.m.

Jim O'Brien
Don Mullner (Tyco)

Siemens aquired 18 mos ago

facility started in late 1930s

Bldg #1 built 1940
28 bldgs.

motor controls
push button
pressure sw. tales

relays
definite / special purpose designs

Raw material → fabrication
punch presses.
small presses

DA 9/16/97

Fabrication Areas

go to plating → assembly

molding →

tool & die
follows
Stamping

powder
coating
painting.
5 stage Washing
materials

Machining.

very little product
warehouse

Batavia - 90,000 sq ft / offices
230,000 sq total
589 employees
2 1/2 shifts 5 day/wk
2 fabrication
3 molding/stamping

[illegible] 9/10/97

product testing - model/UL

Materials
coil copper
steel coils
brass
plate steel

Stamp / punching → oil
hydraulic
molding
oils

Maint. Dept
Tool Room
Automation
Molding

→ Parts Washers.
New Green
Safety Kleen
Turn Key.

No hard chrome plating -

do chemical etching/plating
Zinc
Tin
Chrome

Chrome reduction facility
pretreatment System

[illegible]

for Roz waste

* Metal hydroxide sludge
  Zinc
  Tin
  Lead
  Nickel
  Iron
 out of pretreatment system.

* parts Washers

maintenance paints
  non lead to be

oil - recycled < Excel Environmental

trash compactor
  Cafeteria waste
  flash off of molding
  Recycle w/what can be

AM 9/11/97

metal scrap
  iron
  copper
  brass
} recycled

painted scrap sold by lb.

cardboard compaction

shredded / nonshredded paper.
  computer
  magazines.

PCB accumulation >
 ballast.

metal halide fixtures 55 gal drum

asbestos - few items
  floor tile

test lab - test to destruction
load room
  lots of coils / resistors
  [illegible] plate

new materials are fiberglass
old asbestos
disposed to Abbott asbestos
possibly Chem Waste
not staged anywhere, handled directly
began replacing within
last 7 years.
fire in lab triggered.

Wood scrap -
pallets returned
or sent to trash compactor

oil-pump out collected 4/5 times/yr
skimmed on
skimmer on unit

all 55 gal

→ tested oil 3-4 types for PCB's.

⇒

→ TSCA inspection - clean bill
late 1994

a/k 9/16/97

flood in 1995 wiped
out maintenance dept
and some records.

gas O_2, propane, acetylene
stored outside

plastic drums -
MT soap

MT drums for metal scrap.

~~X~~ conformyl ~~coating~~ coating - silicone
conformal non-hazardous material
use xylene flush
once a year buckets
2-3 5 gal ~~drums~~.
in one 55 gal drum.

trash compactor sits outside,
fed from inside

-no wastes / no materials
stored outside
ex. paper / cardboard
storage. a/k 11/6/97

Orl -
fabrication
tools.

Strip room -
cook burn off unit
after burner
cleaning operation.

ash swept up and put
in trash container or
in pretreatment

corrosives stored for plating

- just replenish acid.

no waste per se.

goes thru septem.

Chrome reduction system
aft 9/16/92 reflux system.

TCE no longer used -
⇒ stopped in 1996 (?)

disposed of bulk in May 1996
located on S - relocated to N -
before 1990

TCE in 1980s
82-84??

Voluntary clean up.

sampled area -
seeking to clean

g/H2O investigation for whole facility.

g/H2O flow towards river
~~2 blocks from river~~
about one mile

not in flood plain -
flood from Rye H2O line
to 100 storm

about
current well 168' process well for
aft 9/16/92 over/con/plating

Water table - ??

25 ft depth soil borings cancelled
due to wet soils / recent rain.

TC contamination
due to spills
but ~~due to~~ alleg. knowledge information
not able to provide details

* CBI - photographs are
requested to be CBI

- have approved closure plan
expect to do it this construction
season.

requested extension to date -
may proposed alternative

drum pad -
haz. constituents

Considering alternatives
to dig and haul.

afh 9/14/92

silver cyanide - no longer
generated -

Metal OH sludge 30-35 bags/yr
stored on scrap dock

freon - no longer due

TCC waste / ceased in 1995

Ace Burn oven replaced
colene salts. -
not generated any longer

Methylene Chloride } no longer
floor stripping } done.

caustic - one time use for
degreasing

naptha - now using green

afh 9/14/92

facility tour at 11:35 a.m.

no overhead equipment
hard hats not worn.

Tool Room

* Safety Kleen
(photo 1) Agitating Parts Cleaner
Green - 35-50 gallons.
can be filtered

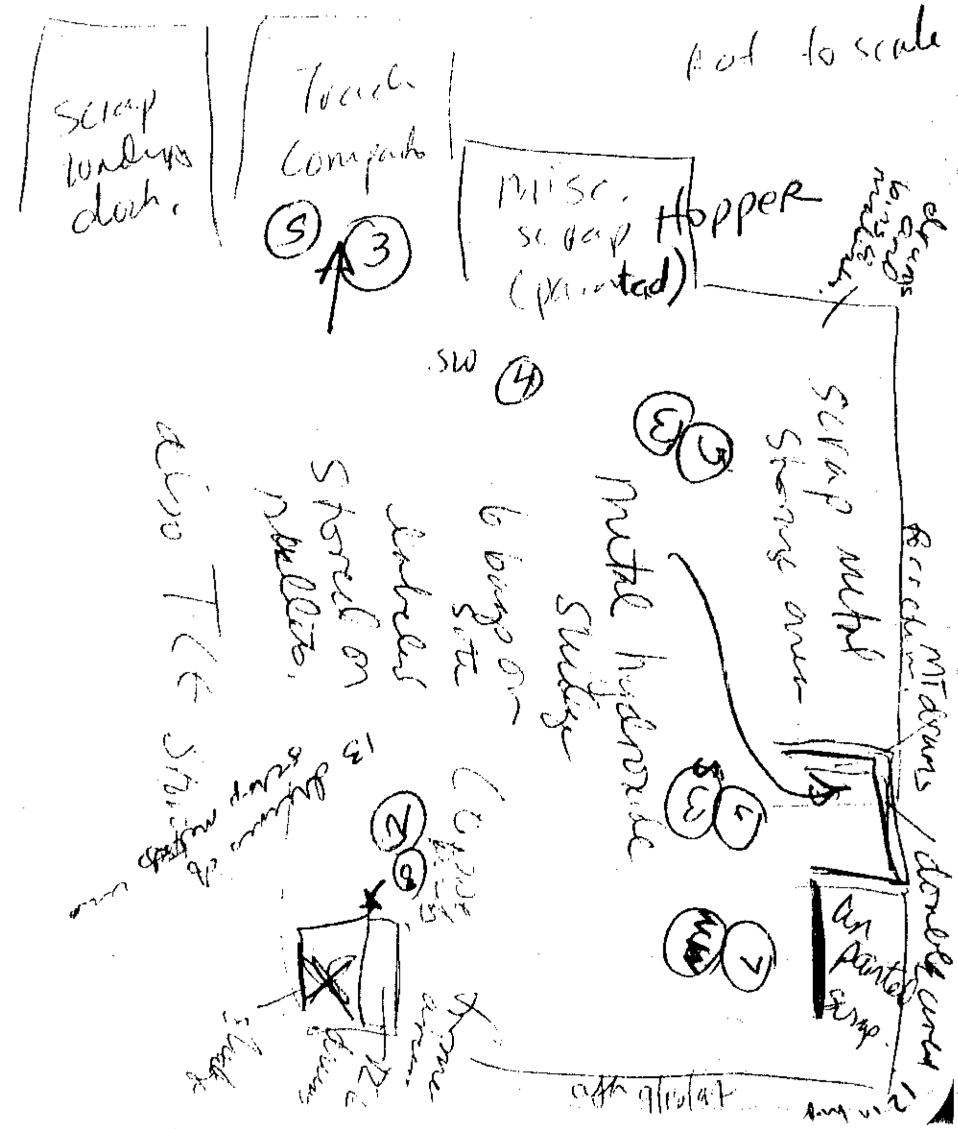
elevated over concrete ~4"
free of stains
minor cracking.

* receptacles for trash in
work area.

* photo (2) - photos of dirty rag / gloves
barrels
3/55 gal drums
over concrete sealed w/
urethane coating.

oil spills cleaned w/ soap H_2O,
scrap dock.

* Scrap dock
Area
not to scale



afh 9/10/97

unpainted
scrap hopper
roll off located in sunken area ~20-30 cubic yd box

collection sump with grated cover at back (sand)

coated sump
collected and pumped and filter

built 3-4 yrs ago.)
mt'd once/month

(8) former storage area for sludge and RC.
concrete floor / no stains observed
double curb on no side
minor cracks.
(RC)

ajh 9/16/95

Waste oil accumulates in equip.
pumped directly into drums.
to oil house.

Automation Room

Safety clean unit.
35 ~~55~~ gal drum.

(9) East looking at

scrap aluminum waste hopper.
satellite accumulation, then taken to scrap dock.

Assembly Operations
Stores, Warehousing
Shipping Room

card board scrap, inspected ajh 9/16/97

Electronics - Room

Conformal Coating
Cleaned from unit
to oil house.

Parts Machine
Washing -
fluid goes to drain
contains soap.
goes to Sanitary District

MOLDING

↙ trash ↘ recycled

molding hopper
- concrete floor
- coated.

10 - looking N

afh 9/10/97

(11.) looking at Molding Room
Safety Klean Parts Cleaner. 5 gal drum on counter.

Hunziker - Filtration machine degreasing

dust dumped in to 20g trash can containers

(12) looking south.

round plastic bead, ground up drops into

then goes in trash.

Parts tumble in w/ beads to clean plastic edges

afh 9/10/97

* hydraulic oil collection drum
pumped from equipment
filtered material
goes into drums
labeled non-haz.
green yellow

blue is MT.

Tower Oil does sampling
on hydraulics.

(13)

(14) Carbboard Scrap Compactor
Area and
Shredder

(15) SO1 - Former Drum
Storage Area
used to have fence & gate.
precious metal scrap.

asphalt, cracked.

TCE / Metal OH sludge
stored here
MT al drums

approx. 40 X 30'

goes back at least 15 yrs.

grassy area in
rear ~~drums~~ were
also stored.
busted skids, crates,
long scrap metal

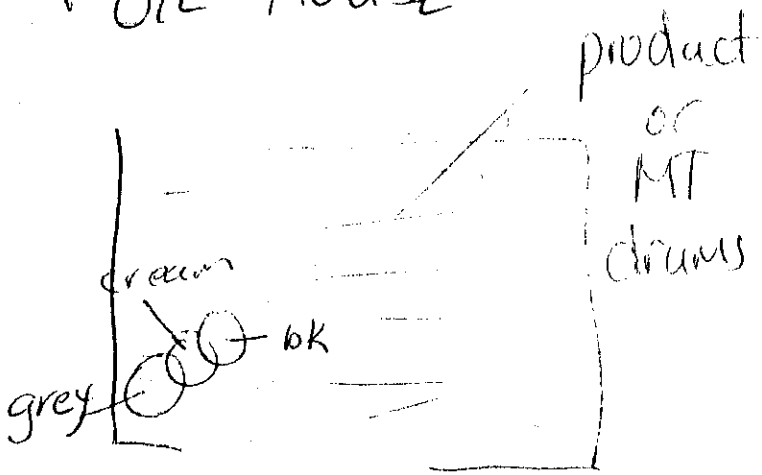
former location of
grease containers (Kitchen grease)
MT plastic drums -
contained scrap iron phosphate

[initials] 9/10/97

Kitchen grease

Fox valley disposal

* OIL HOUSE



grey & cream - non-haz waste oil

black - PCB ballast accumulation

Concrete floor appears free of cracks or stains in product area. Excel takes away

also from skimmer unit

Former TCE Area
Outside bldg. Corner
no special footing
3x3 pad.
Cracking in concrete
no containment.
currently contains
scrap paper / cardboard
MT soap drums

accumulates 6-8 packs of compacted

sump in corner of bldg.
collects floor H_2O -
discharged to driveway outside

adj to 5 drums.
4 brown contain
scrap metal
5th green/yellow

1

9/16/97

9/16/97

floor soap /

rain water collection
sump discharged
to driveway

manually
skim oils - to oil house
never been dumped.

(17) screw machine
Room

STRIP ROOM
Colene

Ace burn off oven

* Wash off area
WW feeds to
pretreatment system
sweepings to trash

1 aft 9/14/17

Plating Dept.

concrete base,
brick floor,
collection trough -
grout on top of concrete base.

entire length of line
segmented, last year
sealed with acid
resistant coating.

(17)

trough discharges to pretreatment

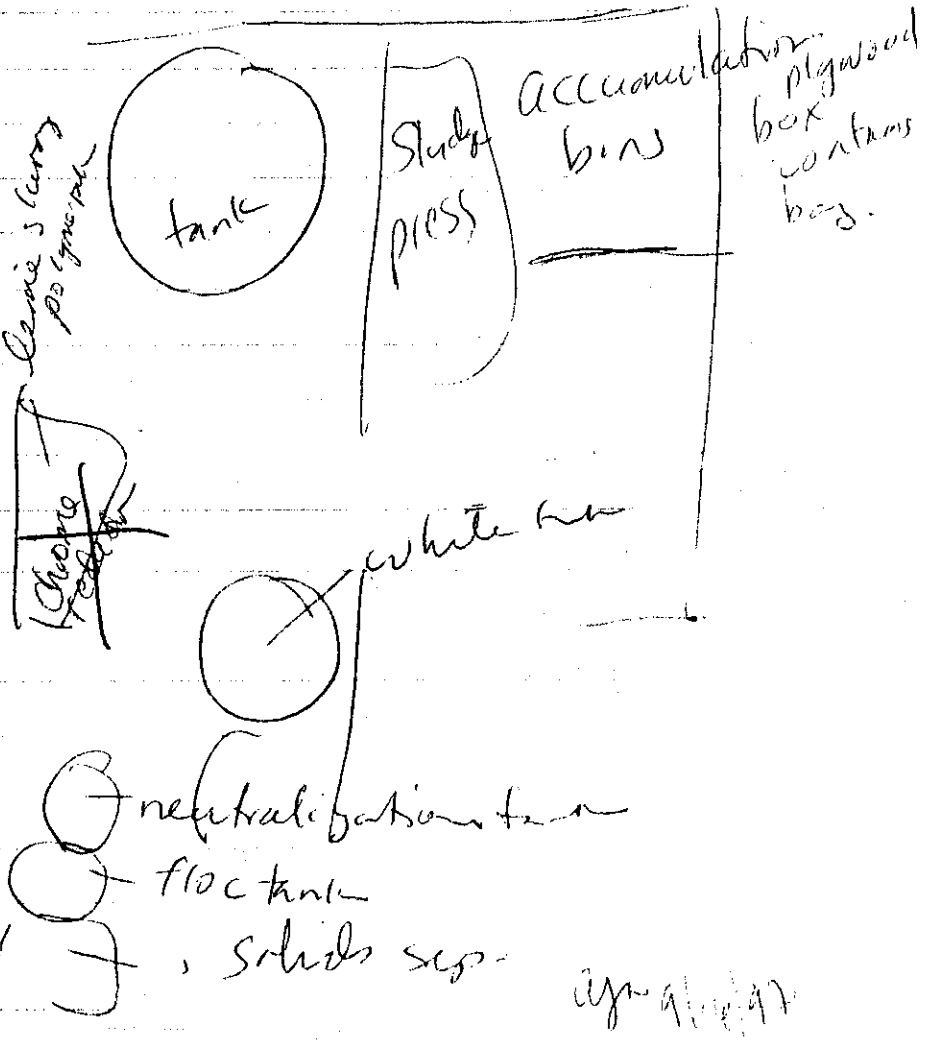
former site of vapor degreaser
TCE in tank, parts cleaned.

generated waste residue as needed.
sodium caustic used.
pumped into 55 gal drums
storage
pump dock
dock Space.

aft 9/14/17

accumulation drum/
stored previously in corner.

Pretreatment system



dgn 9/16/97

⇒ flow chart requested.

→ plating →
↓
holding tank
↓
def

big overhead tank
storage for H_2O for compressors.

Vapor degreaser sump.
sump area.

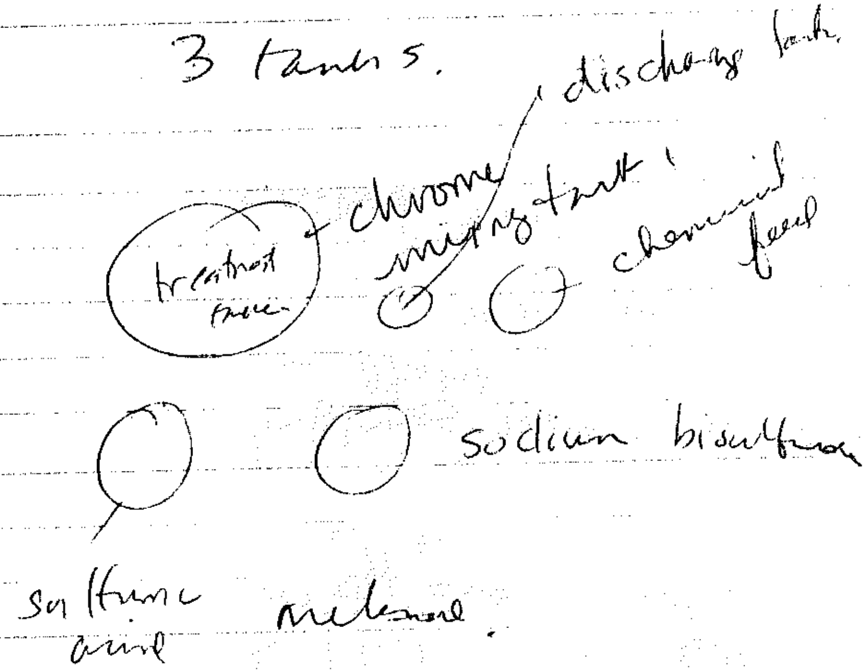
built into brick floor
4-6" deep
used to collect
gunk
pumped from sump
into drum.

spin dryer covers now.

dgn 9/16/97

Chrome reduction

3 tanks.



chrome reduction only ; other go directly + pretreatment

→ another drum of floor washing stuff or soap mix
- no internal code
see p. 27 for correction

/ cyh 9/16/97

Current KE Tank Area.

4 x 4 concrete pad
no containment curbing
adjacent to driveway

outside area of trash compactor
grating in front
discharges to storm sewer located under concrete driveway.

* Parts Washer - Maintenance Shop

* Oil and accumulation drum

* 3 capturing pits
would pumped out.

cyh 9/16/97

⇒ concrete sump -
into ground
3 separate units
20-30 gals /max
weired system.

oilstays in pit until pumped
water to sewer.

Stans inler parts washer -
Concrete / coated concrete

★ TCE outfall area
closed.
identified in due dilligence
grassy area, next
to driveway.

- Employees used to dump,
remediated
- in WESTON info

accumlation rd

a/ 9/14/97

back into pretreatment
Alkali coalescer
5% solution

★ Oil skimmer discharges to
⇒ 55 gal open drum,
to oil house.

PAINT SHOP

★ 3 drums non hazardous waste oils

painted, sealed floors.

Never paint,

filters - every 3 months

filters disposed of in trash,
accumulated powder,
spent powder, discharded in trash
to trash compactor

dust
one 5 gal / month

oil skimmer
Parts Washer,
wash water to sewer.

9/16/97

Maintenance Shop
floor drain discharge
to 3 drains,
pumps out,
Sand flooring
When so oil is collected,

post meeting @ 2:10 p.

Vapor degrm 1) stopped operations / drained
2.) ~~stuff~~ tank

⇒ requested process description
may be in permit app

⇒ requested
Phase II
Closure Plans -
Soil Sampling Plan

9/16/97

PCB
ballast - starts tubes.
placed in drum accumulation
⅓ full
shipped out one drum last year.

follow up questions go thru
alley dept
were 3 USTs
1) 20,000 gallon heating fuel.
removed years ago
2) 500 gal.
gasoline fuel tank by
oil house (in 15 yrs ago)

3) 1 tank
2,000 gal used for
H_2O for tested pump

end of mtg ~ 2:30 p.m.

Ann L. Anderson
Left with Anthony
Nielsen

9/16/97

INCH CM

MEASUREMENT CONVERSIONS

IF YOU KNOW	MULTIPLY BY	TO FIND
LENGTH		
inches	2.540	centimeters
feet	30.480	centimeters
yards	0.914	meters
miles	1.609	kilometers
millimeters	0.039	inches
centimeters	0.393	inches
meters	3.280	feet
meters	1.093	yards
kilometers	0.621	miles
WEIGHT		
ounces	28.350	grams
pounds	0.453	kilograms
grams	0.035	ounces
kilograms	2.204	pounds
VOLUME		
fluid ounces	29.573	milliliters
pints	0.473	liters
quarts	0.946	liters
gallons (U.S.)	3.785	liters
milliliters	0.033	fluid ounces
liters	1.056	quarts
liters	0.264	gallons (U.S.)

TEMPERATURE

°C = (°F - 32) x .555
°F = (°C x 1.8) + 32

Inches	Decimals of foot	Milli-meters
1/16	.0052	1.5875
1/8	.0104	3.1750
3/16	.0156	4.7625
1/4	.0208	6.3500
5/16	.0260	7.9350
3/8	.0313	9.5250
1/2	.0417	12.700
5/8	.0521	15.875
3/4	.0625	19.050
7/8	.0729	22.225
1"	.0833	25.400
2"	.1667	50.800
3"	.2500	76.200
4"	.3333	101.60
5"	.4167	127.00
6"	.5000	152.40
7"	.5833	177.80
8"	.6667	203.20
9"	.7500	228.60
10"	.8333	254.00
11"	.9167	279.40
1 foot	1.0000	304.80

"Rite in the Rain"®
ALL-WEATHER WRITING PAPER

Name Anthony Mulligan

Address 10 South Wacker Drive
Chicago, IL

Phone

Project R05032G103
Siemens - Furnas Controls
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CONTENTS

PAGE	REFERENCE	DATE

1015 Arrive at facility with Ms. Ann Anderson of A.T. Kearney, Inc.

1030: Informational meeting with the following in attendance

Mr. Donald Mulner, Mgr, Siemens-Turnus Controls
Mr. James P. O'Brien, Attorney, Baker & McKenzie
Ms Ann Anderson, A.T. Kearney, Inc.
Mr Anthony Medina, A.T Kearney, Inc

Mtg. starts with Ann Anderson's explanation/overview of the purpose of the A.T Kearney team's visit.

1035: Briefing by Mr. O'Brien.

1040: Process description overview by Mr. Mulner.

RLG
Ann, 07/16/97

Mulner & O'Brien, on history:
* Facility operations began in the 1930's, 1940's
* About '28 Blgd

Mulner on process
Mfr Motor Control devices
Switches

Molding → [illegible]
Tool & Dye Operation → Powder coating of metals
Automated Assembly equipment
Little storage
Electronics assembly → Circuit boards
Steel Storage.

Mulner on facility in general
* About 540 employees
* 2½ shift
* 5 days/week

AM, 09/16/97

Mulner on materials:
* Coil copper, brass, steel, lubricants & oils (hydraulic & others), parts cleaner solvents (parts washers by
* Plating dept
Don't do electroplating
Do Chemical plating
Zn, Cr, Sn, Pb, Ni, [illegible]
Have Chrome reduction facility

* Paint Waste.
* Trash compactor for [illegible] waste & molding
* Collect metal scrap → Sent to a dealer
* Cardboard compaction (Have bales [illegible])
* Paper waste → Computer paper (Recycled) magazines etc.
* Have PCB accumulation from old ballast
* Asbestos → On floor tile.
* Load Room * Large room with lots of coils. Ends of coils have asbestos on them. Spent coils (w/ asbestos [illegible]
... 9/11/97

are sent to Chemical Waste Mgmt.

* Used Oil Contractor = Excel Environmental

On replacing Asbestos Coils with fiberglass
  * Within the past 7 years

* Wood Scrap – Pallets are reused if in good shape. Otherwise thrown into trash compactor

* No bulk tanks of oil, use 55 gal tanks

* Have documentation to show composition of used oil.

* Had a TSCA inspection in ≈ 1994
  Got a "good bill of health."

* Had a flood – about 2 years ago – lost lot of documentation

* Plastic drums – Collected then sent back to supplier

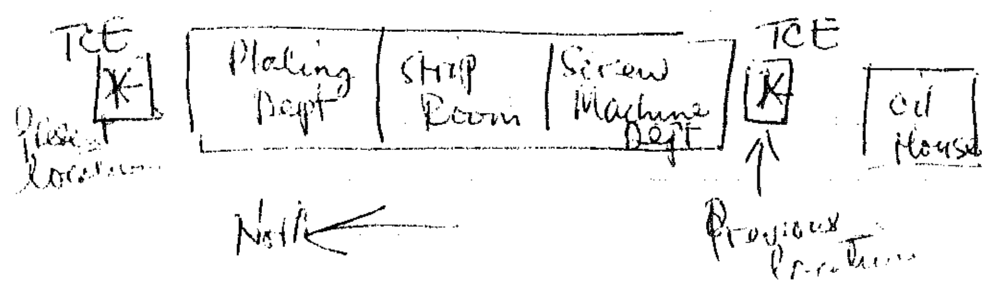
A m —— 19/16/97

(Sillicon)
Conformal Coating Material
Dispose of 2-3 5-gal buckets of this coating material once a year.

Waste Outside:
- Trash compactor is outside, but is fed from inside
- Empty plastic drums/containers
-

STRIP Room: -> Cleaning / Burning Operations
- Chrome reduction system is in plating dept.

Mulner, on soil contamination:
- Sampled areas where the tanks were located.



Above-ground
TCE tank was removed from south end of bldg to north end.

* Submitted request to IL EPA Voluntary Cleanup program. IL EPA said O.K.
* Are to begin a groundwater investigation of the facility.
* Have not sampled groundwater. Have done some preliminary investigations.
* Have (2) groundwater wells, one of which is a process well.

* Process well at ≃ 110 ft. Get water from there & use it for some process
* Other well is at ≃ 600 ft. It was never used.

O'Brien, on Closure plan(s) ⇒ 1130
- Have an approved plan
- Not started digging yet

AM 09/16/97

1130

Waste Streams – Past & Present Mgmt Practices

Silver Cyanide – No longer used.

Metal Hydroxides – Still used. Sludges are stored in scrap dock area

Freon – No longer used. Was for parts cleaning.

TCE –

NaOH (Colene Salt Sol'n) – Not used

CH_2Cl_2 – Used to be used as a floor cleaner. No longer used.

Caustic Soda – Bus bar use.

Naphtha – Parts cleaner. No longer used

AM – 09/16/97

1137: End of informational briefing

1145: All photos taken by A Medrano

Photo 1 Time: 1145

Location: In tool room, facing north.

Description: Safety Kleen Agitating Parts Cleaner. Approx 55 gal volume.

Photo 2 Time: 1150

Location: Facing north, across from doorway leading to scrap dock

Description: Containers used to store oily rags

1152 Exit to scrap dock

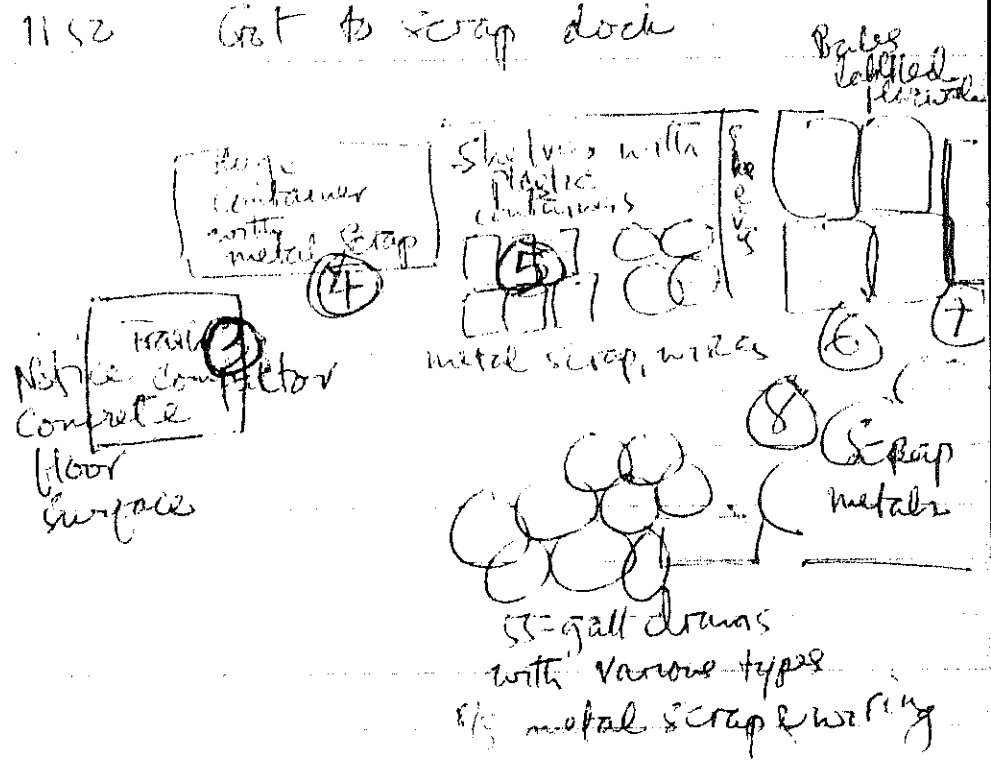


Photo 3 Time: 1158

Direction/Location:

At Scrap dock View facing South View of Trash Compactor

Photo 4 Time: 1200

At Scrapdock, standing by feed location of compactor. Facing S. West.

Photo 5 Time: 1203

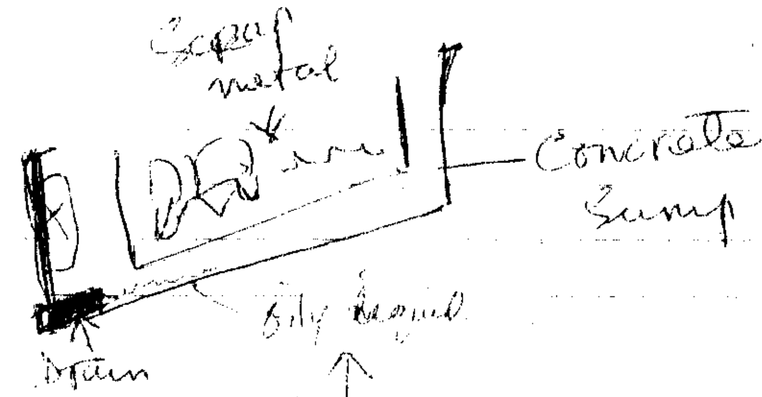
View (facing West) of Scrap metals [illegible] storage area at Scrap dock

Photo 6 Time: 1203

View (facing West) of metal hydroxide Sludge bags (white). Empty drums on left side of bags will be returned to supplier(s).

Photo 7 Time: 1205

View (facing N. West) of container of ~~[illegible]~~ unpainted Scrap metal. Container is ≃ 7 yds X 4 yds x 3 yds. It's located in an inclined Sump. At time of visit, we observed some oily materials + some scrap on sump floor. There was a drain at lower end of sump



Pump out oil about once a month.

Photo 8 Time: 1210

View (facing N.E) of Storage area for TCE, metal hydroxides, & other misc. process equipment still in Scrap dock

Photo 9 Time: 1215

Facing East, in Automation Area View of 55 gal. S.K Oil/Parts Cleaner recycling unit.

AH

09/16/[illegible]

1223 – Walked through assembly area & electronics assembly

Note ⇒ Dumpsters in these area some with paper waste others dedicated to metal waste

Photo 10 Time: 1235

View (facing ~~of~~ north) of plastic waste hopper. To be thrown away
AM, 07/16/97

(

Photo (11) Time 1236

Facing East

Taken in Thermoset Molding Dept. Safety Kleen Parts Cleaner unit.

Photo (12) Time. 1240

View (facing South) of the Flanziker filter fronde de-flashing machine. ~~Dusts~~ Medium
AM, 07/16/97

used for cleaning eventually gets worn out. Disposed of in hoppers (see photo 10) after it has been collected at bottom of de-flashing machine

Photo (13) Time. 1245

View (facing north) of used-oil collection drum. The Blue-colored drum is empty.

Photo (14) Time: 1250

View (facing north) of Corrugated Cardboard Compacter.

1250.
SO1 – Former Scrap, TCE, Empty Oil drums, etc
Storage area
Notice Tarmac surface. Area is Cordoned off.

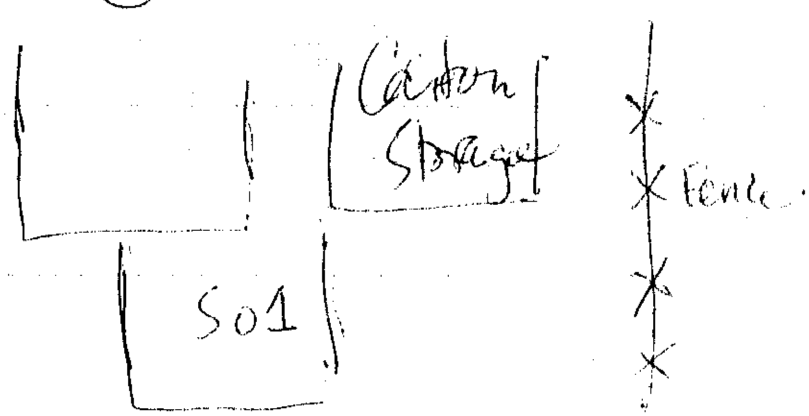
Photo (15)

Time 1258

(SO1)

Photo (16)

Time 1300



Grassy area ~~next~~ to Carton Storage. Was used for storing roll-off boxes.

Photo (17)

Time 1304

Oil house. (Photo taken facing East, in door way while shooting it)
Notice the 3 Drums
(Labelled 55 gal) → Black → Contains PCB ballast
(labelled 55 gal) → Cream → Used Oil
(35 gal) → Creamish Grayish → Used Oil
Labelled

Photo (18)

Time 1305

Former location of TCE storage tank. It's the area with the scrap compacted cardboard.

Facing north

AM

09/17/97

1307: Got to screw machine bldg

*Observed
- Stormwater drain inside bldg. ~~Used~~ Am, 09/17/97
- Soapy water

Photo (19) Time: 1311

View of soapy water container (& stormwater drain before the soapy water drum)
S.F.C. Chemi ~~off~~ oil off the soapy water → Excell
Am, 09/16/97

Photo (20) Time: 1315

Wash off area in strip bldg

Approx: 2-yds X 2-yds

Photo (21) Time 1320

Rinse water Collection trough in Plating house (↓ drain)
Water flows to the pre-treatment system.

Photo (22) & (23) Time 1325

Water Treatment System (Parts of) in Plating house

Photo (24) Time 1330

In Electroplating Bldg. View of former location of Vapor degreaser spot. Now taken up by another piece of equipment

Photo (25) Time: 1335

Chrome mixing tank, part of the Cr-waste treatment process

Photo 26 Time 1340

Concrete pad corresponding to point labelled as "active TCE storage tank" on site plan.

NEW FILM

Photo 27-1 ← Time: 1343

List

Outside view of scrap dock. Facing north. Maint. shop to the right.

Note: Scrap dock has a ~~an overhead~~ AM, 09/16/97 (translucent) roofing.

AM

09/16/97

Photo 28-2 Time 1345

Location Facing North in Maint. Shop

Blue drum → Used oil accumulation

Red → Safety Kleen Parts washer accumulation.

Behind the drums is the Safety Kleen Vapor degreaser equipment unit.

Photo 29-3 Time 1350

Location

Location of alleged TCE - dumping, a cup at a time, by an employee

Photo 30-4 Time: 1355

Container of used oil that is skimmed off of process water in plating area.

Facing north to scrap dock by the door

Photo 31 Time: 1400

In Paint Shop

View of (3) Used Oil Drums — 55 gallons —

Photo 32 Time: 1405

In Paint Shop

Oil Skimming unit (drum) at end of parts washer equipment line

AM

09/16/97

1410: Close-out meeting

* Ann Anderson makes information requests

1425: Don Mulner, on Asbestos
- They use contractors to dispose of the resistors containing asbestos. Now use fiber glass resistors. No more asbestos.

1430: Don Mulner, on USTs
- There were three
(2) gasolines - removed, 2,000 gallons
(1) Fuel - 500 gallons, Removed, 15 yrs ago
(1) Water tank - 2,000 gallons. Furnace used to manufacture pressure switches for water tanks. The tank was used for testing products.

1432: End of close-out meeting

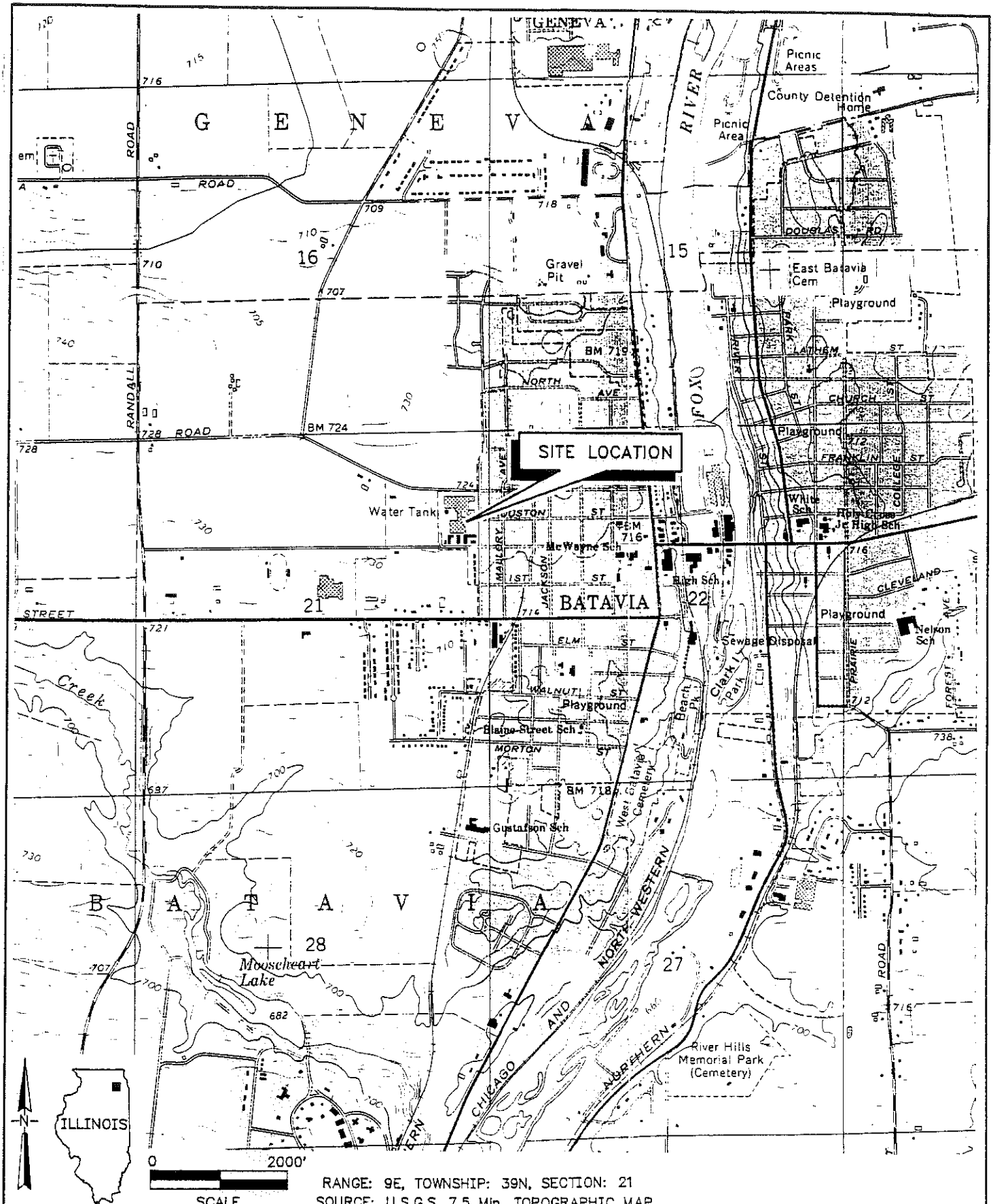
AM

09/16/97

1440. Left the facility with Ms Ann Anderson

A. 09/16/97

APPENDIX C
FACILITY LAYOUT AND SWMU/AOC LOCATIONS



RANGE: 9E, TOWNSHIP: 39N, SECTION: 21
SOURCE: U.S.G.S. 7.5 Min. TOPOGRAPHIC MAP
AURORA NORTH QUADRANGLE.

FIGURE 1–1

WESTON MANAGERS DESIGNERS/CONSULTANTS

Three Hawthorn Parkway
Vernon Hills, Illinois
60061

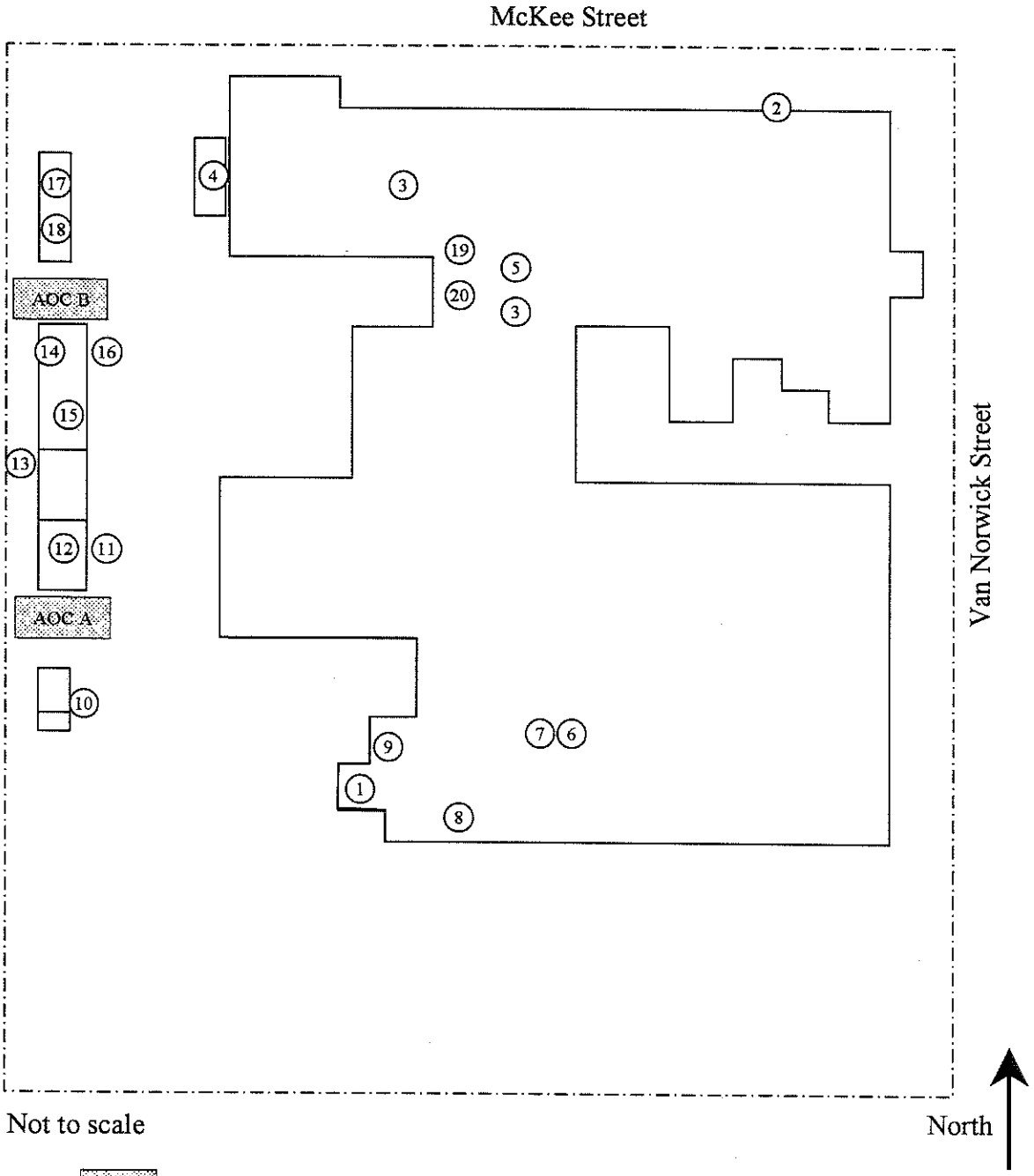
AREA LOCATION MAP

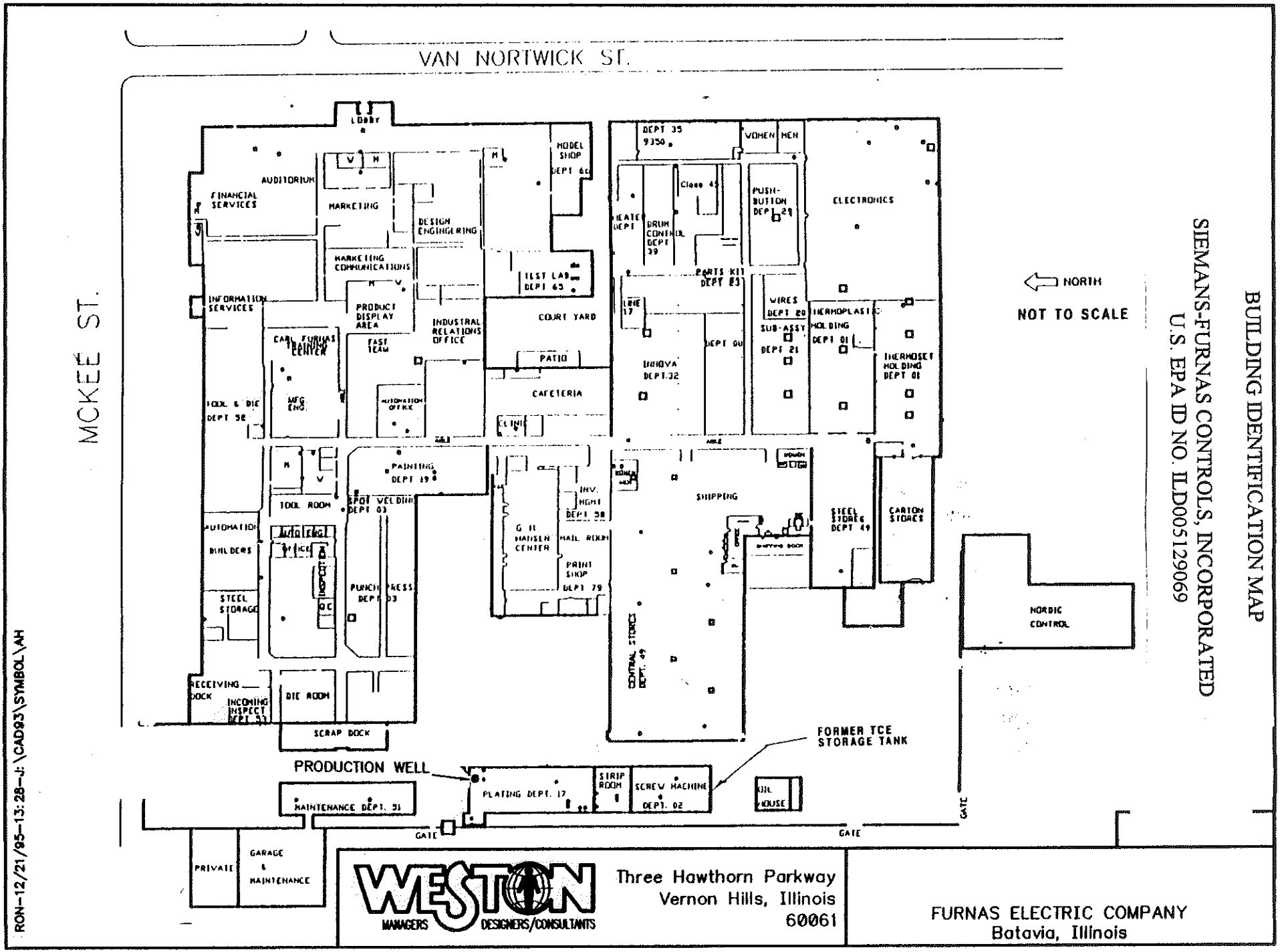
FURNAS ELECTRIC COMPANY
Batavia, Illinois

R000195

SWMU/AOC LOCATION MAP

SIEMANS-FURNAS CONTROLS, INCORPORATED
U.S. EPA ID NO. ILD005129069





BUILDING IDENTIFICATION MAP

SIEMANS-FURNAS CONTROLS, INCORPORATED

U.S. EPA ID NO. ILD005129069

WESTON MANAGERS DESIGNERS/CONSULTANTS

Three Hawthorn Parkway
Vernon Hills, Illinois
60061

FURNAS ELECTRIC COMPANY
Batavia, Illinois

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APPENDIX D
FIGURE 1 - SOIL SAMPLE LOCATIONS
AND ANALYTICAL RESULTS FOR HAZARDOUS
WASTE STORAGE AREA (FORMER DRUM STORAGE YARD - SWMU 1)

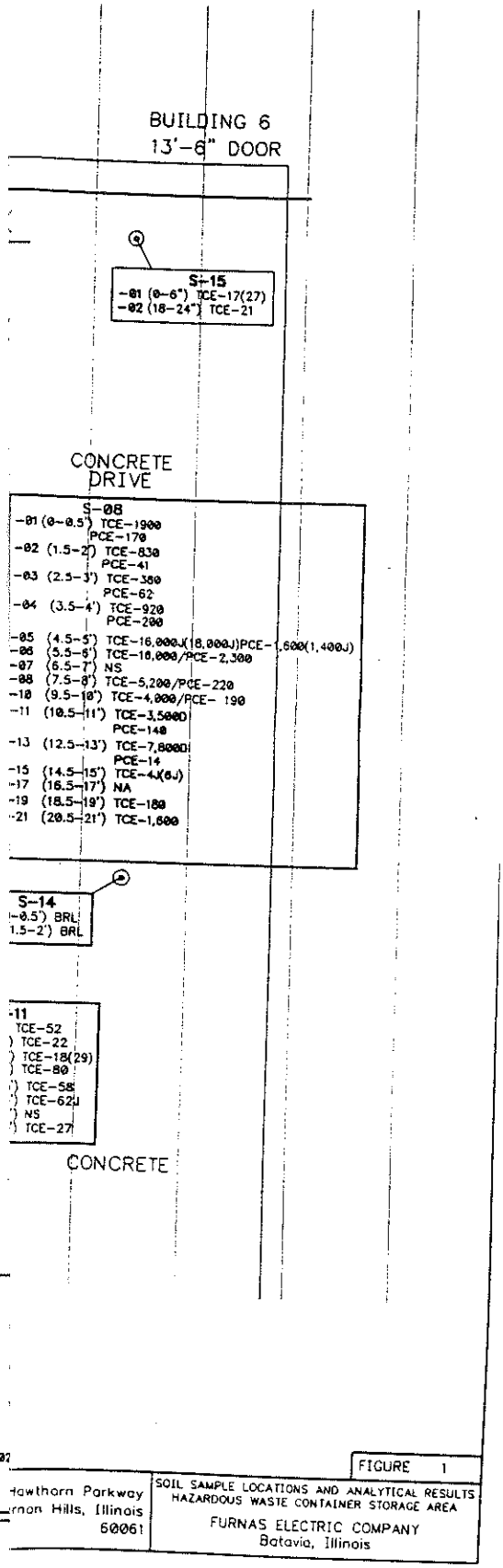

FIGURE 1

SOIL SAMPLE LOCATIONS AND ANALYTICAL RESULTS
HAZARDOUS WASTE CONTAINER STORAGE AREA

FURNAS ELECTRIC COMPANY
Batavia, Illinois

Hawthorn Parkway
rnon Hills, Illinois
60061